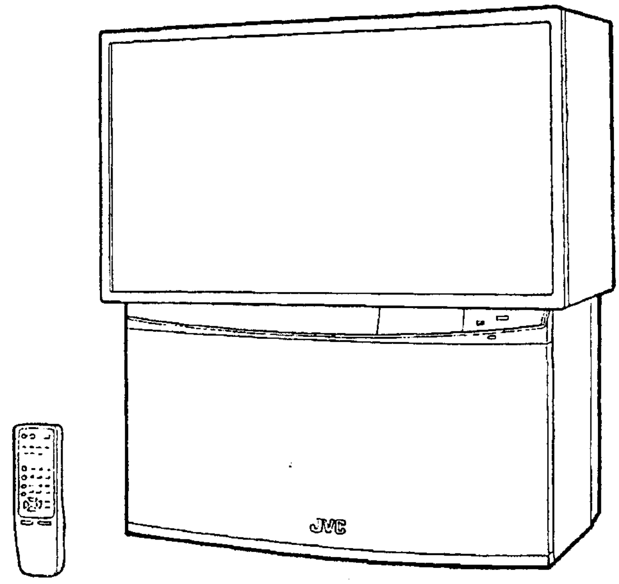
JVC

SERVICE MANUAL

WIDE SCREEN PROJECTION TELEVISION

NV-55BX4(US)

BASIC CHASSIS
PU



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No.50774
Apr.1993

SPECIFICATIONS

Item	Content
Type	WIDE SCREEN PROJECTION TELEVISION
Reception format	NTSC,BTSC(multi-channel sound)
Reception range	VHF 2 to 13,UHF 14 to 69; Sub Mid,Mid,Super,Hyper and Ultra bands (180-channel frequency synthesizer system)
Power source	120 V AC,60 Hz
Power consumption	Max.280W,Avg.235W
Projection tube	Three 6. 7-inch[17cm] tubes
Screen	Transparent screen
Screen size	55-inch[139.7cm],aspect ratio of 16:9, 48"(W)×27"(H)×55"(diagonal)[121.8cm(W)×68.5cm(H)×139.7cm(diagonal)]
Audio output	Front: 10W+10W+10W Rear:10W+10W(With 8 ohm connected)
Speakers	Round 6. 3"[16cm] speaker×2,round 4. 7"[12cm] speaker×1
Antenna terminal	75-ohm(VHF/UHF)terminal(F-type connector)×2 SPLIT OUT terminal×1
INPUT 1,2,3,4 jacks	S-VIDEO(except INPUT3): Y/1Vp-p Positive,75 ohms(negative sync provided) C/0.286 Vp-p(burst signal),75 ohms VIDEO:1Vp-p,75 ohms AUDIO:500mV rms (-4dBs),high impedance
Variable audio output terminal	More than 0 to 1550mV rms (+6dBs),low impedance (400Hz when modulated 100%)
Line output terminal	Video:1Vp-p,75-ohms Audio:500mV rms (-4dBs),low impedance (400Hz when modulated 100%)
AV COMPU LINK jacks	3.5 mm φ mini jack ×2
PIP/MAIN/SURROUND AUDIO OUT jack	3.5 mm φ stereo mini jack
Speaker output jacks (Front/Rear)	Impedance 6 to 8 ohms
External dimensions(W×H×D)	50"×52-3/4×27-5/8"[126.8cm×133.8cm×70.0cm]
Weight	256 lbs[116kg]
Accessories	Remote control unit (RM-C980)×1 AA-size dry cell battery ×2 AV Compu Link cable (1.5m)×1

Design & specification subject to change without notice.

SAFETY PRECAUTIONS

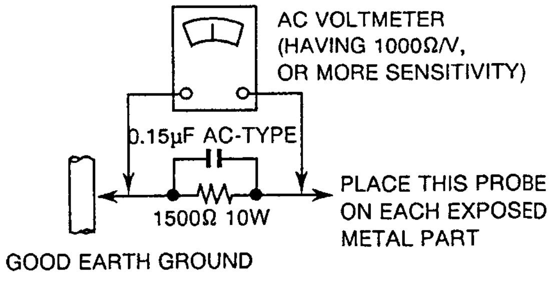
1. The design of this product contains special hardware, many circuits and components specially for safety purposes. For continued protection,no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.
2. Alterations of the design or circuitry of the products should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the parts list of Service manual. **Electrical components having such features are identified by shading on the schematics and by (⚠) on the parts list in Service manual.** The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the parts list of Service manual many create shock, fire, or other hazards.
4. **Use isolation transformer when hot chassis.**
   The chassis and any sub-chassis contrained in some products are connected to one side of the AC power line. An isolation transformer of adequate capacity should be inserted between the product and the AC power supply point while performing any service on some products when the HOT chassis is exposed.
5. **Don't short between the LIVE side ground and NEUTRAL side grounding or EARTH side ground when repairing.**
   Some model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE (⊥) side GND, the NEUTRAL (⏚) side GND and EARTH (⏚) side GND. Don't short between the LIVE side GND and NEUTRAL side GND or EARTH side GND and never measure with a measuring apparatus (oscilloscope etc.) the LIVE side GND and NEUTRAL side GND or EARTH side GND at the same time.
   If above note will not be kept, a fuse or any parts will be broken.
6. If any repair has been made to the chassis, it is recommended that the B_1 setting should be checked or adjusted (See ADJUSTMENT OF B_1 POWER SUPPLY).
7. The high voltage applied to the picture tube must conform with that specified in Service manual. Excessive high voltage can cause an increase in X-Ray emission, arcing and possible component damage, therefore operation under excessive high voltage conditions should be kept to a minimum, or should be prevented. If severe arcing occurs, remove the AC power immediately and determine the cause by visual inspection (incorrect installation, cracked or melted high voltage harness, poor soldering, etc.). To maintain the proper minimum level of soft X-Ray emission, components in the high voltage circuitry including the picture tube must be the exact replacements or alternatives approvided by the manufacturer of the complete product.
8. Do not check high voltage by drawing an arc. Use a high voltage meter or a high voltage probe with a VTVM. Discharge the picture tube before attempting meter connection, by connecting a clip lead to the ground frame and connecting the other end of the lead through a 10kΩ 2W resistor to the anode button.
9. When service is required, observe the original lead dress. Extra precaution should be given to assure correct lead dress in the high voltage circuit area. Where a short circuit has occurred, those components that indicate evidence of overheating should be replaced. Always use the manufacturer's replacement components.
10. **Isolation Check**
   (Safety for Electrical Shock Hazard)
   After re-assembling the product, always perform an isolation check on the exposed metal parts of the cabinet (antenna terminals, video/audio input and output terminals, Control knobs,metal cabinet, screwheads, earphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.

(1) **Dielectric Strength Test**
The isolation between the AC primary circuit and all metal parts exposed to the user, particularly any exposed metal part having a return path to the chassis should withstand a voltage of 1100V AC (r.m.s.) for a period of one second.
(. . . . Withstand a voltage of 1100V AC (r.m.s.) to an appliance rated up to 120V, and 3000V AC (r.m.s.) to an appliance rated 200V or more, for a period of one second.)
This method of test requires a test equipment not generally found in the service trade.

(2) **Leakage Current Check**
Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground (water pipe, etc.). Any leakage current must not exceed 0.5mA AC (r.m.s.).

- **Alternate Check Method**

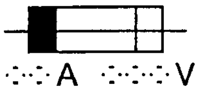
Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Use an AC voltmeter having 1000 ohms per volt or more sensitivity in the following manner. Connect a 1500Ω 10W resistor paralleled by a 0.15μF AC-type capacitor between an exposed metal part and a known good earth ground (water pipe, etc.). Measure the AC voltage across the resistor with the AC voltmeter. Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.35V AC (r.m.s.). This corresponds to 0.5mA AC (r.m.s.).



11. **High voltage hold down circuit check.**
    After repair of the high voltage hold down circuit, this circuit shall be checked to operate correctly.
    See item **"How to check the high voltage hold down circuit"**.

■ ONLY CANADA

This mark shows a fast operating fuse, the letters indicated below show the rating.



INSTALLATION

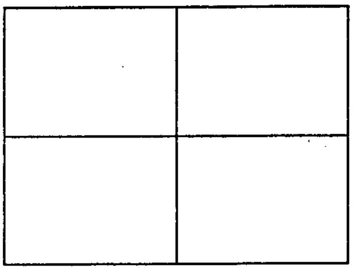
Installation site

1. The rear of this set is provided with a cooling fan or ventilation openings. Install the set more than 10 cm from a wall and in a location with good ventilation.
2. Avoid the following types of locations.
   1) Unstable locations (location must be able to withstand 256lbs weight)
   2) Locations subjected to direct sunlight
   3) Near stoves or other heating devices
   4) Locations subjected to humidity or oily smoke
   5) Dusty locations
   6) Locations with strong vibration
3. After determining the installation site, place the accessory caster tray under the casters.

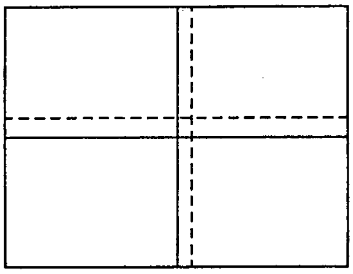
Installation adjustment

Perform the following convergence adjustment after installing, moving or changing the orientation of the set.

1. Supply an input signal and press the [Menu] key of the remote controller.
2. With key [9], select 9. Initial Set-up.
3. With key [9], select 9. Adj V Position/Conver.
4. With key [2], select 2. Convergence. A cross pattern appears on the screen



5. With key [1], select 1. Red.
6. Operate the remote controller [-], [+] (left and right) and arrow [△], [▽] (up and down) keys to overlap the red colored lines on the green colored lines.
7. With key 2, select 2. Blue.
8. Operate the remote controller [-], [+] (left and right) and arrow [△], [▽] (up and down) keys to overlap the blue colored lines on the green colored lines.



9. With key [3], select 3. End (settings will not be stored unless [3] is pressed).

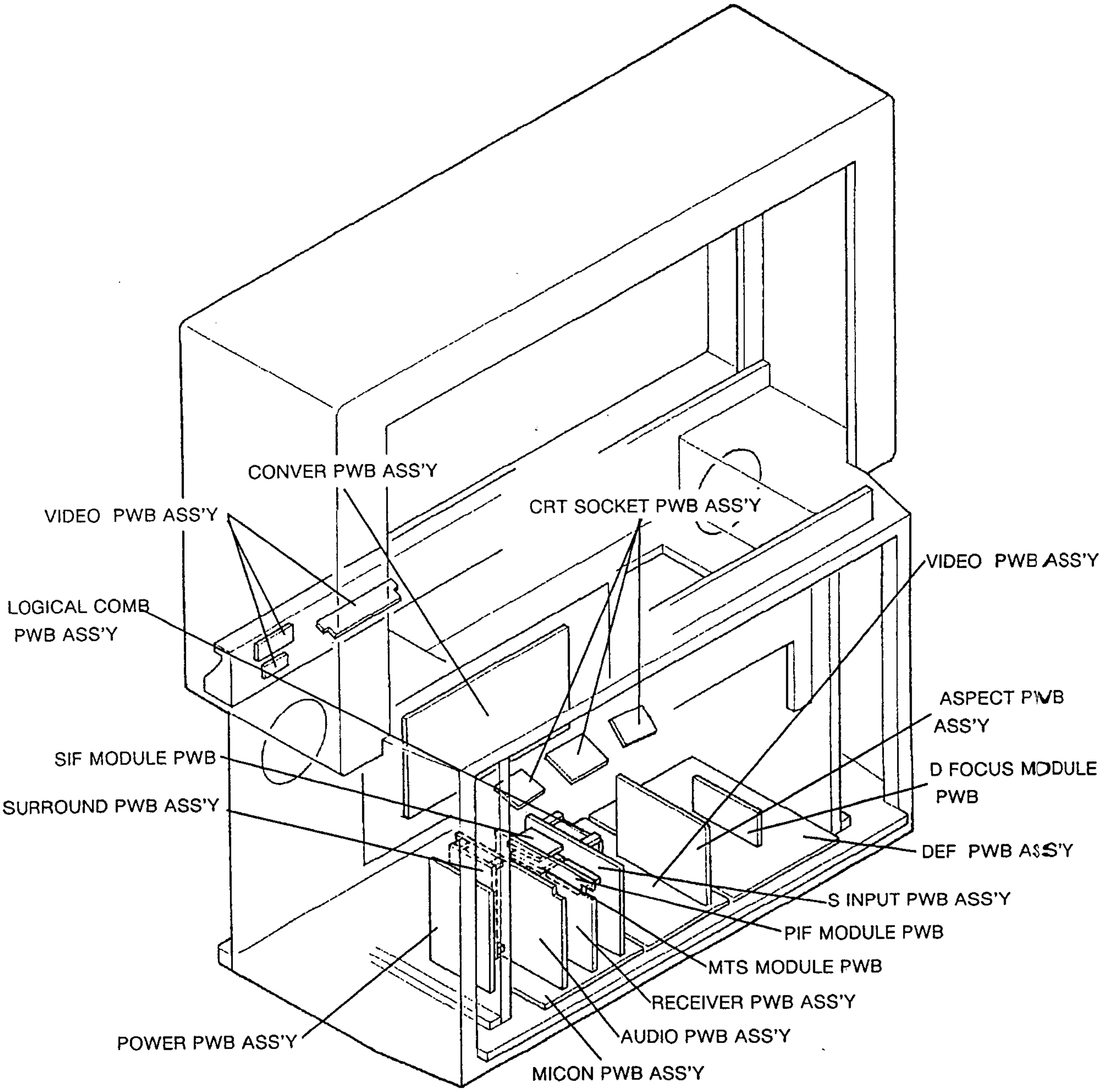
MAIN PARTS LOCATION

Circuit board arrangement

Circuit boards and modules are composed as follows.

- ● MICON PWB ASS'Y(PU-7000A)
  [MICON PWB ASS'Y]
  - ● AUDIO PWB ASS'Y(PU-6000A)
    [AUDIO PWB ASS'Y]
    - ● SURROUND PWB ASS'Y(HZ-6201A)
  - ● RECEIVER PWB ASS'Y(PU-1100A)
    [RECEIVER PWB ASS'Y]
    - ○SIF MODULE PWB(SGZ-F005A)
    - ○PIF MODULE PWB(SGZ-F007A)
    - ○MTS MODULE PWB(SGY-6001A)
  - ● S INPUT PWB ASS'Y(PU-1200A)
    [S INPUT PWB ASS'Y]
    - ● LOGICAL COMB PWB ASS'Y(HZ-4201A)
- ● VIDEO PWB ASS'Y(PU-1000A)
  [VIDEO PWB ASS'Y]
  - ● ASPECT PWB ASS'Y(EZ-1D002A)
    [ASPECT PWB ASS'Y]
    - ○MODULE PWB(EZ-X001A) ×3
    - ○MODULE PWB(EZ-Y001A] ×3
- ● DEF PWB ASS'Y(PU-2000A)
  [DEF PWB ASS'Y]
  - ○D FOCUS MODULE PWB(PU-D001A)
- ● CRT SOCKET PWB ASS'Y(PU-3000A)
- ● POWER PWB ASS'Y(PU-9000A)
- ● CONVER PWB ASS'Y(PU-8000A)

TOTAL PWB ASS'Y = 12
MODULE PWB = 10


CONVER PWB ASS'Y
VIDEO PWB ASS'Y
CRT SOCKET PWB ASS'Y
VIDEO PWB ASS'Y
LOGICAL COMB PWB ASS'Y
ASPECT PWB ASS'Y
D FOCUS MODULE PWB
SIF MODULE PWB
SURROUND PWB ASS'Y
DEF PWB ASS'Y
S INPUT PWB ASS'Y
PIF MODULE PWB
MTS MODULE PWB
RECEIVER PWB ASS'Y
AUDIO PWB ASS'Y
POWER PWB ASS'Y
MICON PWB ASS'Y

SPECIFIC SERVICE INSTRUCTIONS

Projection unit replacement

■ Replacing 3 RGB projection units

If all 3 RGB projection units are to be replaced, first replace just the R and B units. Adjust the convergence using G as the reference. Then replace the G unit and align the G convergence with R and B.
Avoid removing all 3 projection units simultaneously.

Screen handling cautions

■ Store screen vertically

Store the screen vertically in order to avoid deformation. If placing the screen sideways, position the screen face upwards and be sure to place spacers between the screen and stand to prevent slackening of the screen
Use ample care to avoid scratching or soiling the screen during handling.

Picture status memory setting

Perform setting with the remote controller. Refer to the setting instructions indicated in this manual.

Memory replacement note

When replacing IC403 of the PU-7000A, perform the following. If not performed, problems such as absence of picture can occur.

1. Set S401 of the Micon board to on.
2. Press the Display key of the remote controller.
3. Set the memory contents as follows.

1) Video input	4
2) CH allocation	3 band
3) RF relay	dual
4) AI debug	no
5) P mute	long
6) AFC monitor	no
7) Cordless jack	yes

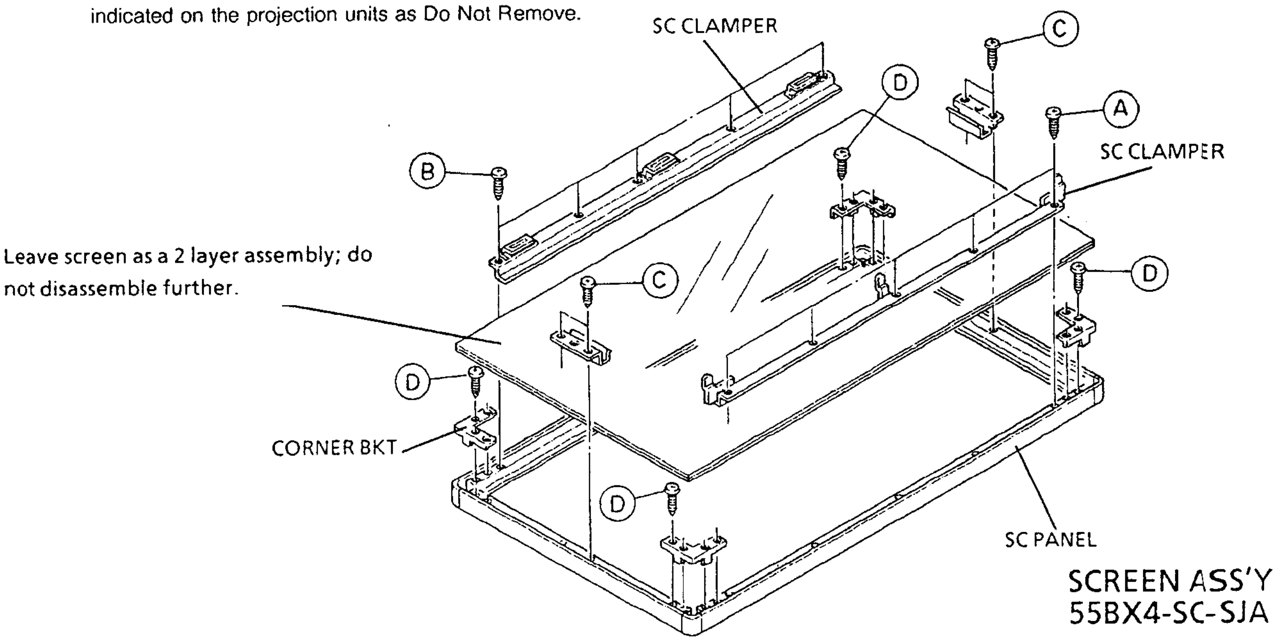
Disassembly cautions

1. Parts not to be disassembled

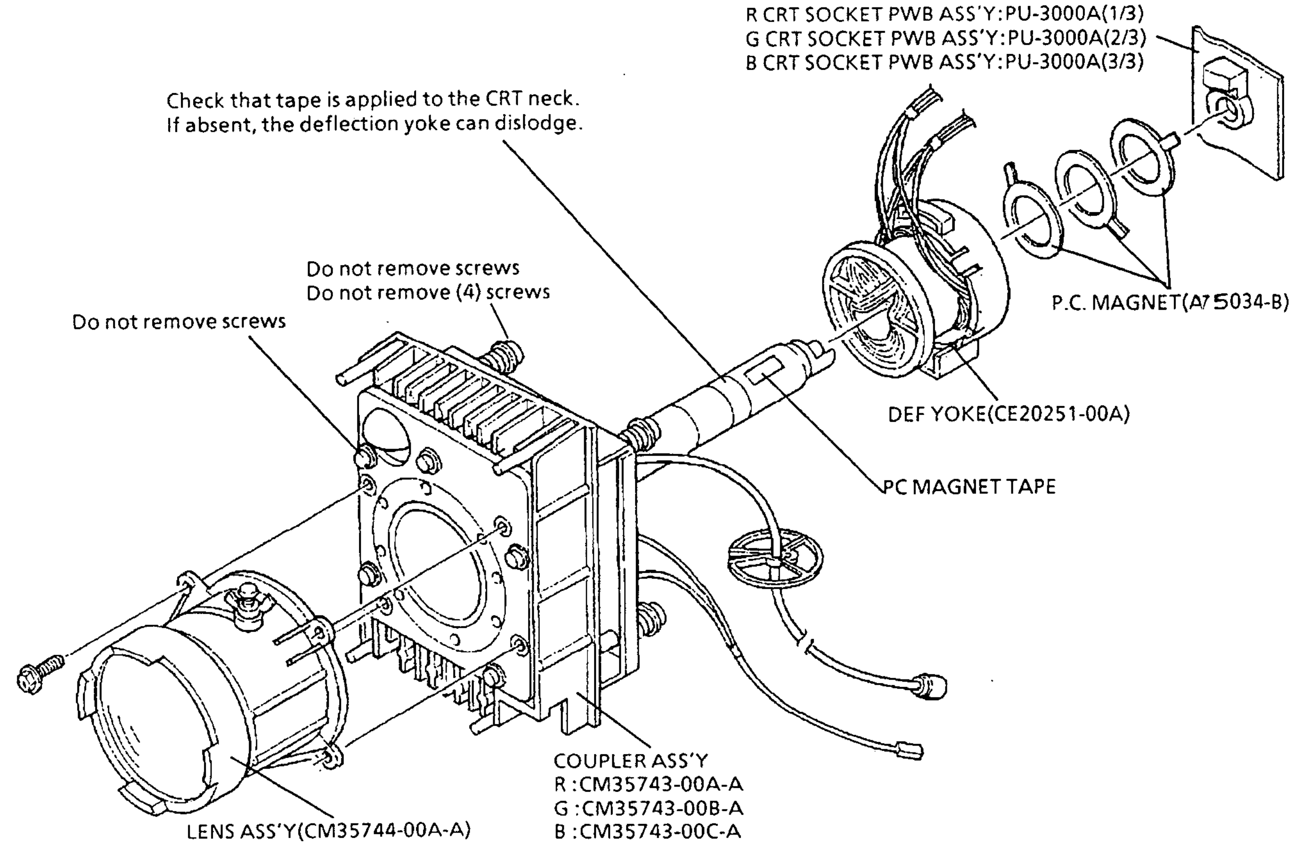
1) When performing service on this set, do not disassemble the projection units or screen.
   To replace the projection units or screen, disassemble only to the state indicated in the figure.
2) Take out 5 screws A, 5 screws B, 4 screws C and 16 screws D.
3) By no means remove screws or wires that are indicated on the projection units as Do Not Remove.

2. Wire clamps and bands

1) Use care to install wire clamps correctly.
2) Do not remove the wire dress bands. If removed, return the wires to their original positions.


SC CLAMPER
C
D
A
SC CLAMPER
B
Leave screen as a 2 layer assembly; do not disassemble further.
C
D
D
CORNER BKT
D
SC PANEL

SCREEN ASS'Y
55BX4-SC-SJA


R CRT SOCKET PWB ASS'Y:PU-3000A(1/3)
G CRT SOCKET PWB ASS'Y:PU-3000A(2/3)
B CRT SOCKET PWB ASS'Y:PU-3000A(3/3)
Check that tape is applied to the CRT neck.
If absent, the deflection yoke can dislodge.
Do not remove screws
Do not remove (4) screws
Do not remove screws
P.C. MAGNET(A75034-B)
DEF YOKE(CE20251-00A)
PC MAGNET TAPE
COUPLER ASS'Y
R :CM35743-00A-A
G :CM35743-00B-A
B :CM35743-00C-A
LENS ASS'Y(CM35744-00A-A)

Section removals

■ Backboard

1. Take out 2 screws Ⓐ.
2. Loosen 8 screws Ⓑ.
3. Slightly raise and remove the back board.

■ Rear cover

1. Remove the back board.
2. Take out 2 screws Ⓓ.
3. Take out 8 screws Ⓒ.
4. Slightly raise and remove the rear cover.

■ Power PWB assembly

1. Remove the back board.
2. Take out 1 screw Ⓔ.
3. Pull the board outward to remove.

■ HV divider

1. Remove the back board.
2. Take out 2 screws Ⓗ.
3. Remove the HV divider

■ Mirror

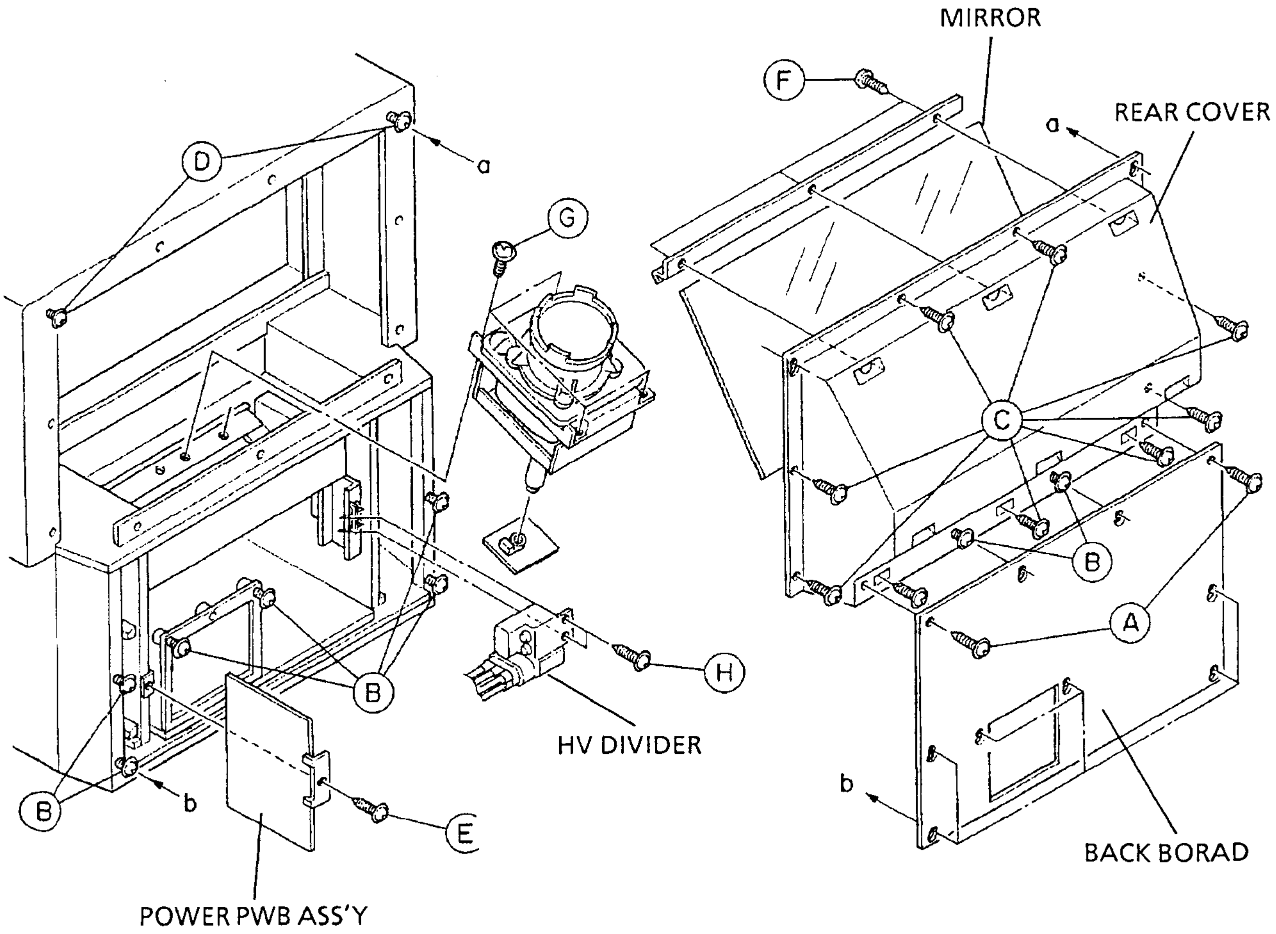
1. Remove the back board and rear cover.
2. Take out 3 screws Ⓕ.
3. Remove the mirror holder. Slightly raise and remove the mirror.

※ Note: The mirror is front-coated. Do not touch the front of the mirror.

■ Projection unit

1. Remove the back board and rear cover.
2. Take out 4 screws Ⓖ.
3. Remove the projection unit.

※ Note: Refer to Projection unit replacement when removing and replacing the projection units.



Screen assembly

1. Take out 2 screws Ⓐ (at left and right of the screen bottom).
2. The screen assembly is secured by hooks. Raise slightly to disengage of the screen from the hooks.
3. Place the screen with face upwards on a flat stand.

■ Control panel

1. Remove the speaker grille by pulling it outward.
2. Take out 3 screws Ⓑ.
3. Pull the front grille outward.

■ Front board

1. Remove the speaker grille (pull the bottom edge to remove).
2. Loosen 2 screws Ⓗ.
3. Take out 1 screw Ⓒ.
4. Shift the front board slightly toward the left and pull outward to remove.
5. Disengage 6 tabs to remove the Conver PWB assembly.

■ Focus pack assembly

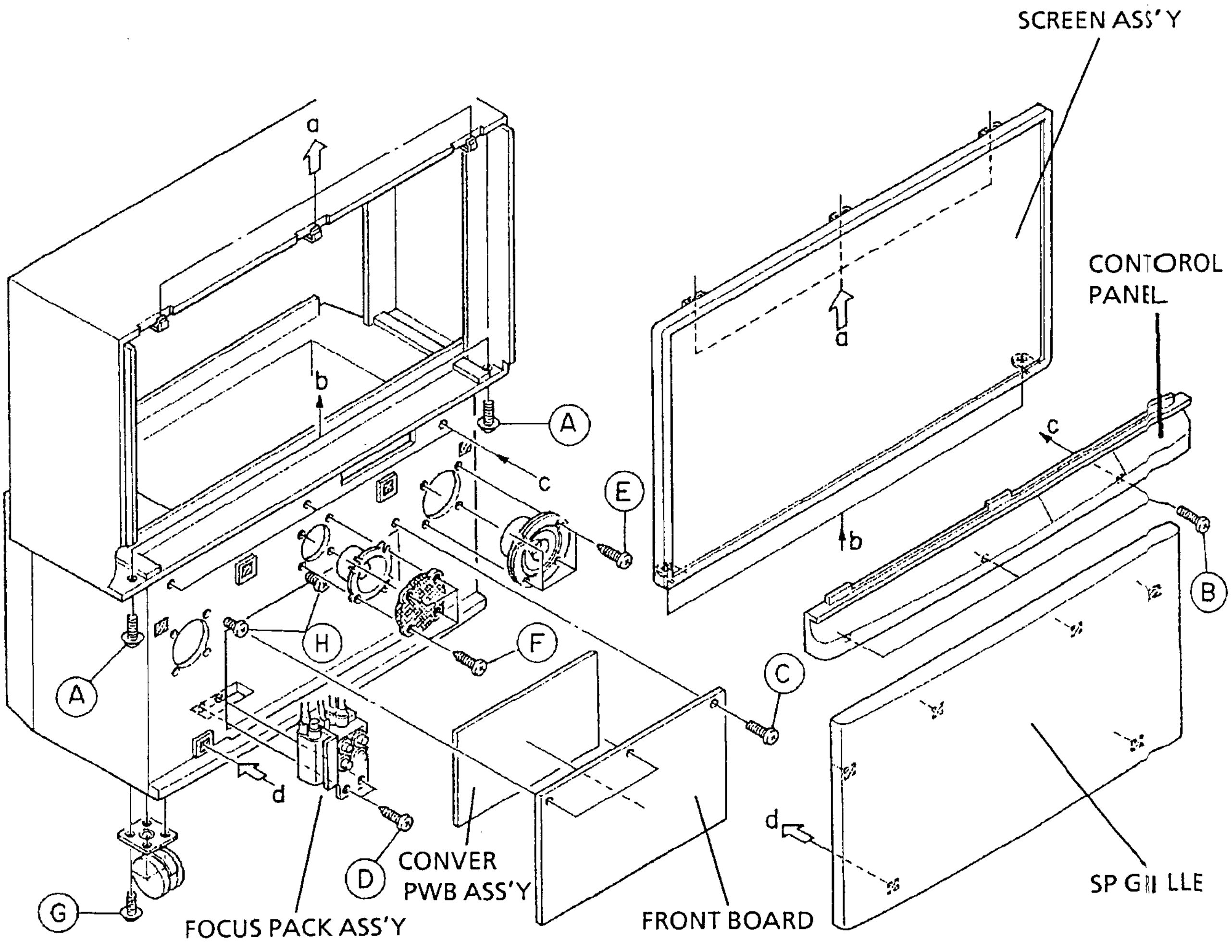
1. Remove the speaker grille and front board.
2. Take out 2 screws Ⓓ.
3. Remove the focus pack assembly.

■ Speaker

1. Remove the speaker grille.
2. Take out 4 screws Ⓔ.
3. Pull the speaker outward.
4. Disengage the speaker cord and replace the speaker.
5. Take out 4 screws Ⓕ.
6. Pull the center speaker outward.
7. Disengage the speaker cord and replace the speaker.

■ Caster

1. Lay the set sideways on a soft cloth. Lay the set either on its left or right side, but not with the screen downwards.
2. Take out 4 screws Ⓖ.
3. Replace the caster.



■ PWB assemblies

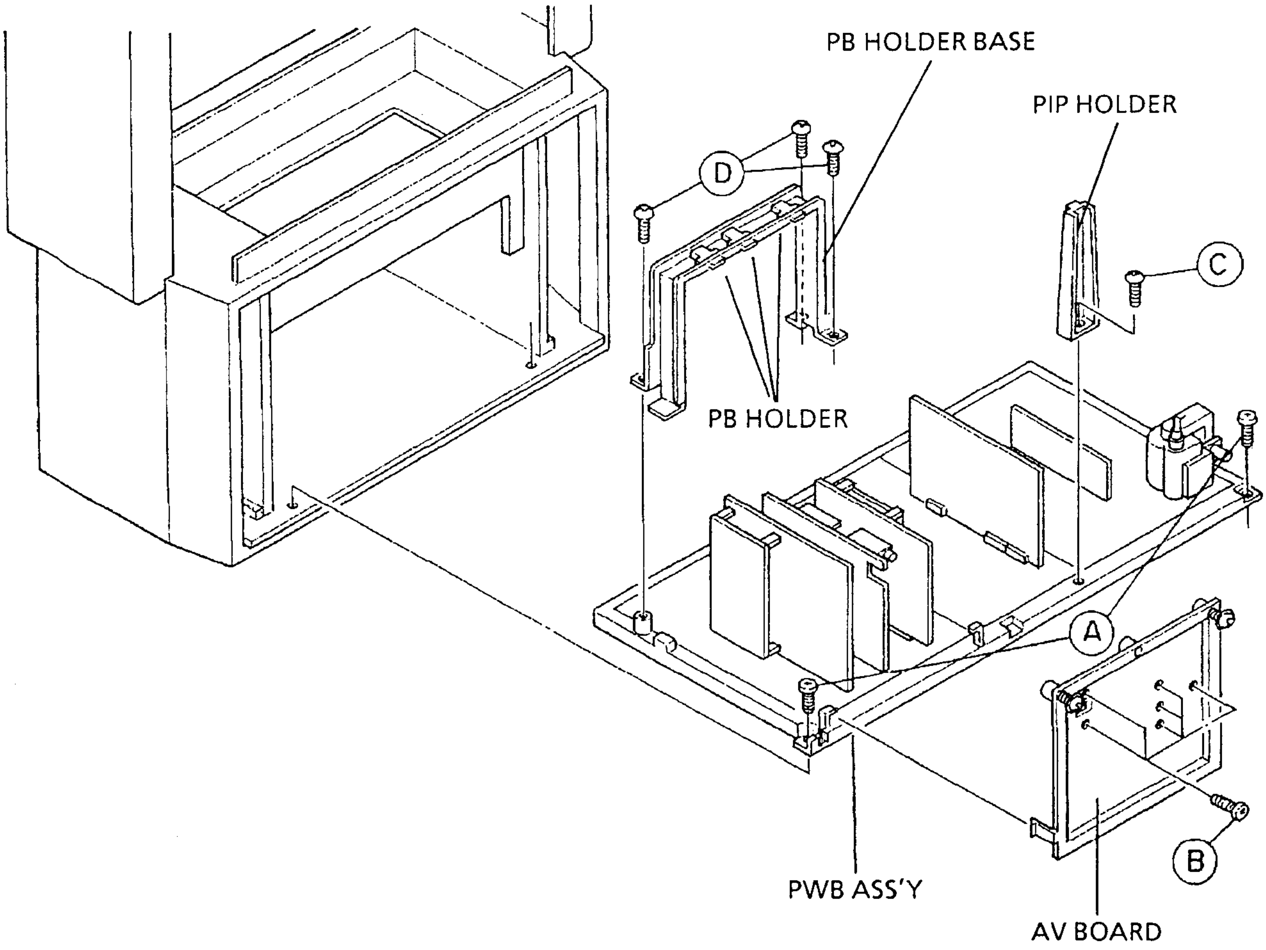
1. Remove the back board.
2. Take out 2 screws Ⓐ.
3. Pull the PWB assemblies (Micon, Video, Def) outward to remove.
4. Disengage wire clamps as required. However, replace these to original positions when completing work. Particularly observe absence of wires in the area of the high voltage transformer.

■ AV board

1. Remove the back board.
2. Take out 6 screws Ⓑ.
3. Pull the AV board outward to remove.

■ PIP holder and PB holder base

1. Remove the back board and pull out the PWB assemblies.
2. Take out 1 screw Ⓒ and remove the PIP holder.
3. Take out 2 screws Ⓓ and remove the PB holder base.
4. The boards are secured by the PB holder. Remove the PB holder and the boards can be removed.



SERVICE ADJUSTMENT

Preparation

1. Set the switches and controls as follows. Unless otherwise indicated, perform adjustments at these settings.

■ System constants

Set Micon board S401 to on and press the remote controller Display key. This completes initial setting (see Memory replacement note of the Specific Service Instructions).

■ AV status setting

Press the Theater/AV Status key of the remote controller and select 2. AV Status A. Press the Function keys and adjust to center the user adjustment. Enter AV Status A into the memory.

Set Micon board S401 to on. Use the remote controller Function keys (△up, ▽down, +. -) to set as follows. Afterwards, return S401 to off.

TI (tint)	90
CO (color)	50
PI (picture)	80
BR (bright)	80

■ Theater status setting

Set Micon board S401 to on and press the Theater/AV Status key of the remote controller. Select 1. Theater Status. Use the Function keys (△up,▽ down, +. -) to set as follows. Afterwards, return S401 to off.

TI (tint)	90
CO (color)	50
PI (picture)	80
BR (bright)	80

■ Service switch settings

Set as indicated in Table 1.

2. Notes
   1) Refer to the Operation Manual regarding adjustments using the remote controller.
   2) If removing boards, such as the RGB output, be sure to first cut off the power. Insert paper or other insulator to ensure the removed board board does not contact other parts.

Tools and test equipment list

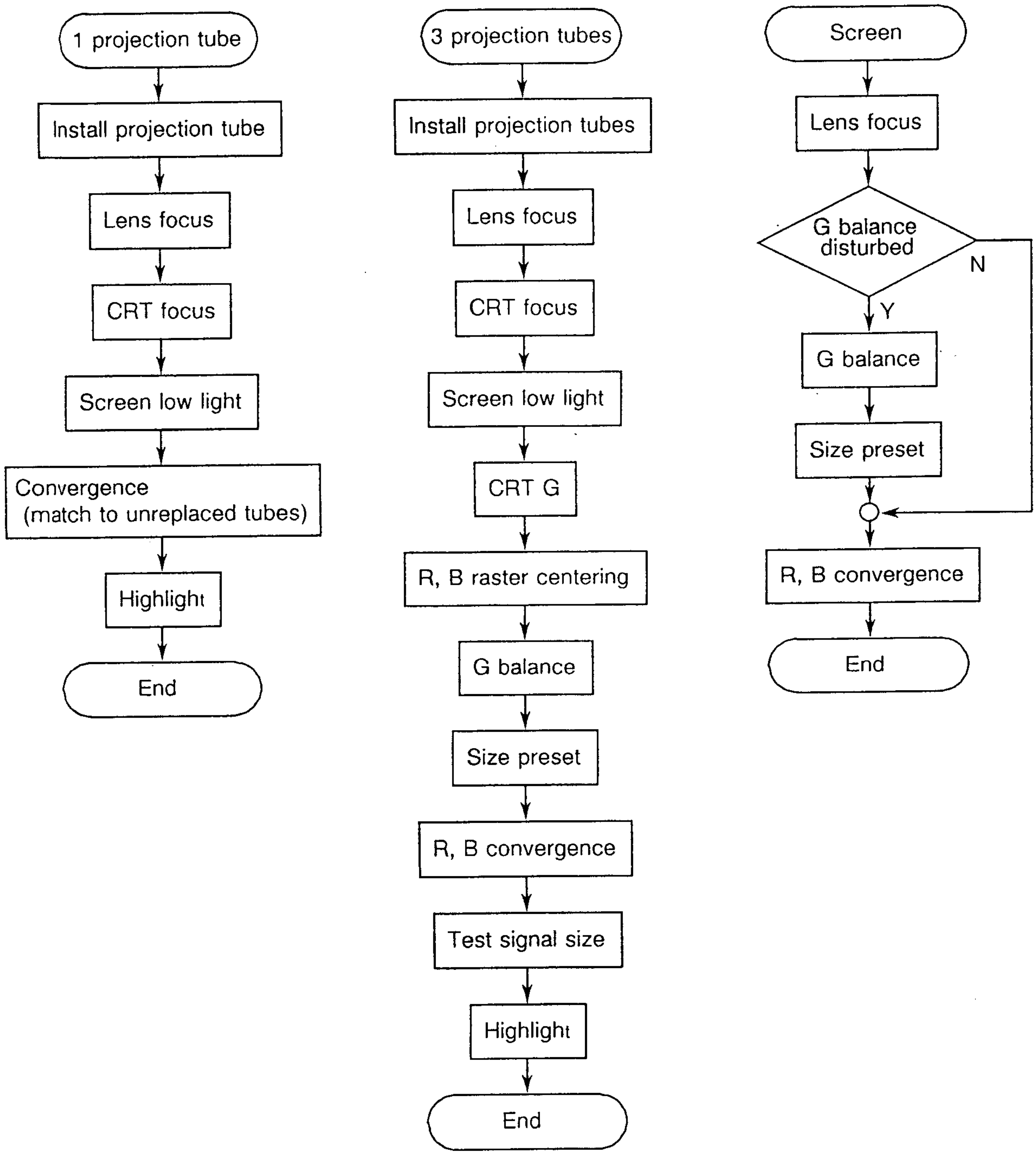
1) Digital voltmeter
2) Oscilloscope
   Dual trace
   DC - 15 MHz
   Delayed sweep function
   10:1 and 100:1 probes
3) Signal generator
   Color bar
   Split color bar
   Crosshatch
   Full white
   Greyscale
4) Audio multiplex signal generator
5) High voltage meter (withstand voltage more than 33 kV)
6) Frequency counter
7) Short jumper
8) Insulated adjusting driver (flat blade - small)
9) Electrolytic capacitors (10 µF/16 V x 2), resistor (1 kΩ),VR(500kΩ)
10)Remote controller (RM-C902)
11)MTS generator (if available)

Board	symbol	Setting
PU-1000A	S501	Off (forward as viewed from rear of set)
PU-1200A	S401	Off (forward as viewed from rear of set)
	S402	″
PU-2000A	S401	N (forward as viewed from rear of set)
PU-3000A	S301	N (right as viewed from front of set)
	S302	N ″
	S303	N ″
PU-7000A	S401	Off (forward as viewed from front of set)

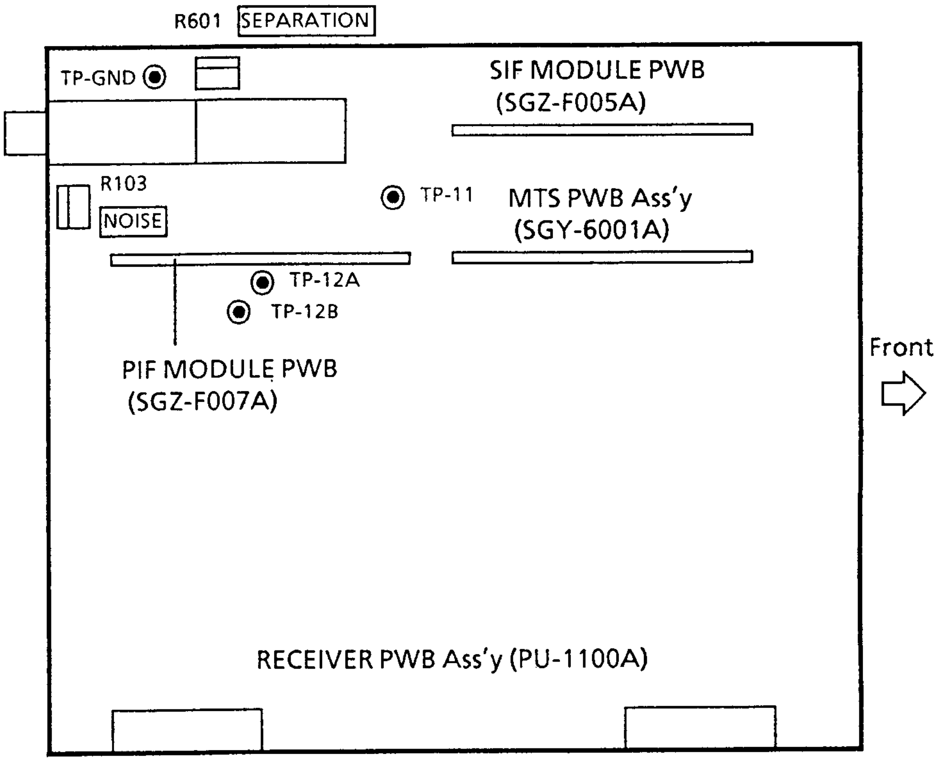
Table 1

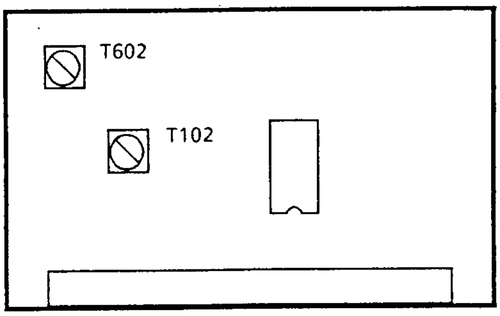
Adjustment flowcharts when replacing screen and projection tubes

※ Only the main adjustments are indicated. Also confirm other adjustments as required.

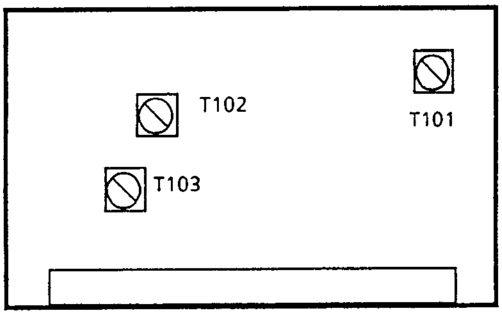

1 projection tube
Install projection tube
Lens focus
CRT focus
Screen low light
Convergence (match to unreplaced tubes)
Highlight
End
3 projection tubes
Install projection tubes
Lens focus
CRT focus
Screen low light
CRT G
R, B raster centering
G balance
Size preset
R, B convergence
Test signal size
Highlight
End
Screen
Lens focus
G balance disturbed
N
Y
G balance
Size preset
R, B convergence
End

ADJUSTMENT LOCATIONS

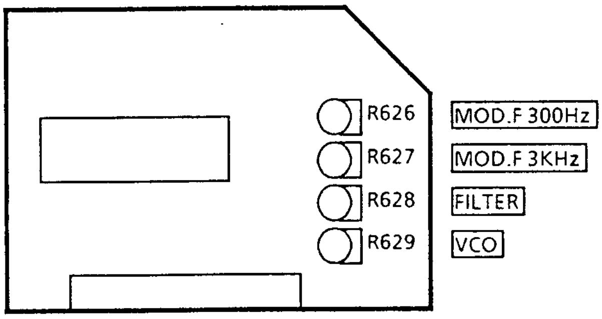

R601
SEPARATION
TP-GND
SIF MODULE PWB
(SGZ-F005A)
R103
NOISE
TP-11
MTS PWB Ass'y
(SGY-6001A)
TP-12A
TP-12B
PIF MODULE PWB
(SGZ-F007A)
Front
RECEIVER PWB Ass'y (PU-1100A)



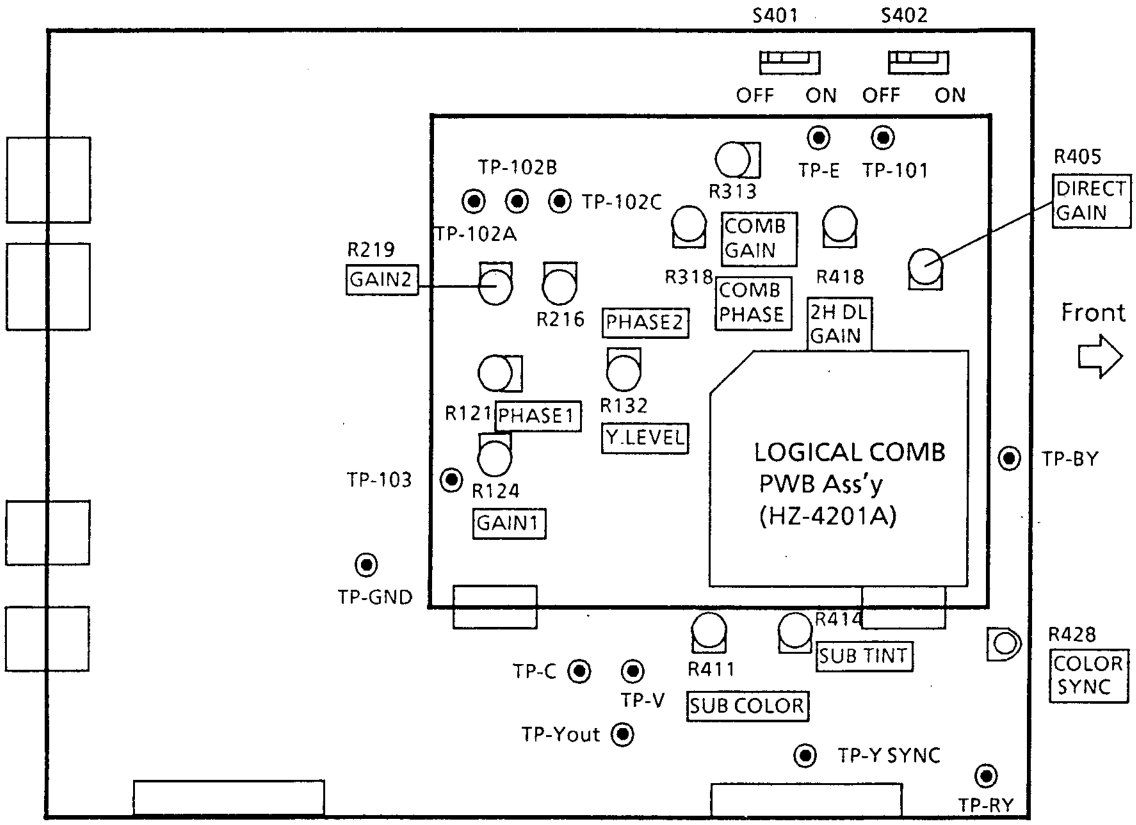
SIF MODULE PWB (SGZ-F005A)


T102
T101
T103

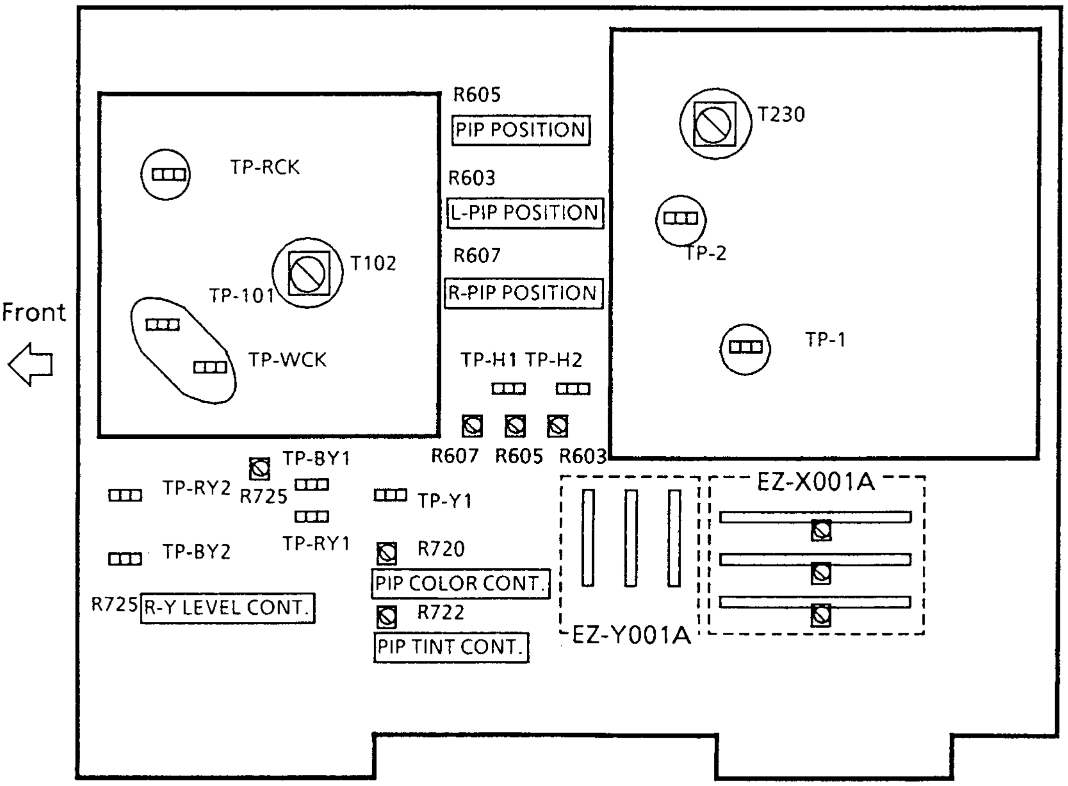
PIF MODULE PWB (SGZ-F007A)


R626
MOD.F 300Hz
R627
MOD.F 3KHz
R628
FILTER
R629
VCO

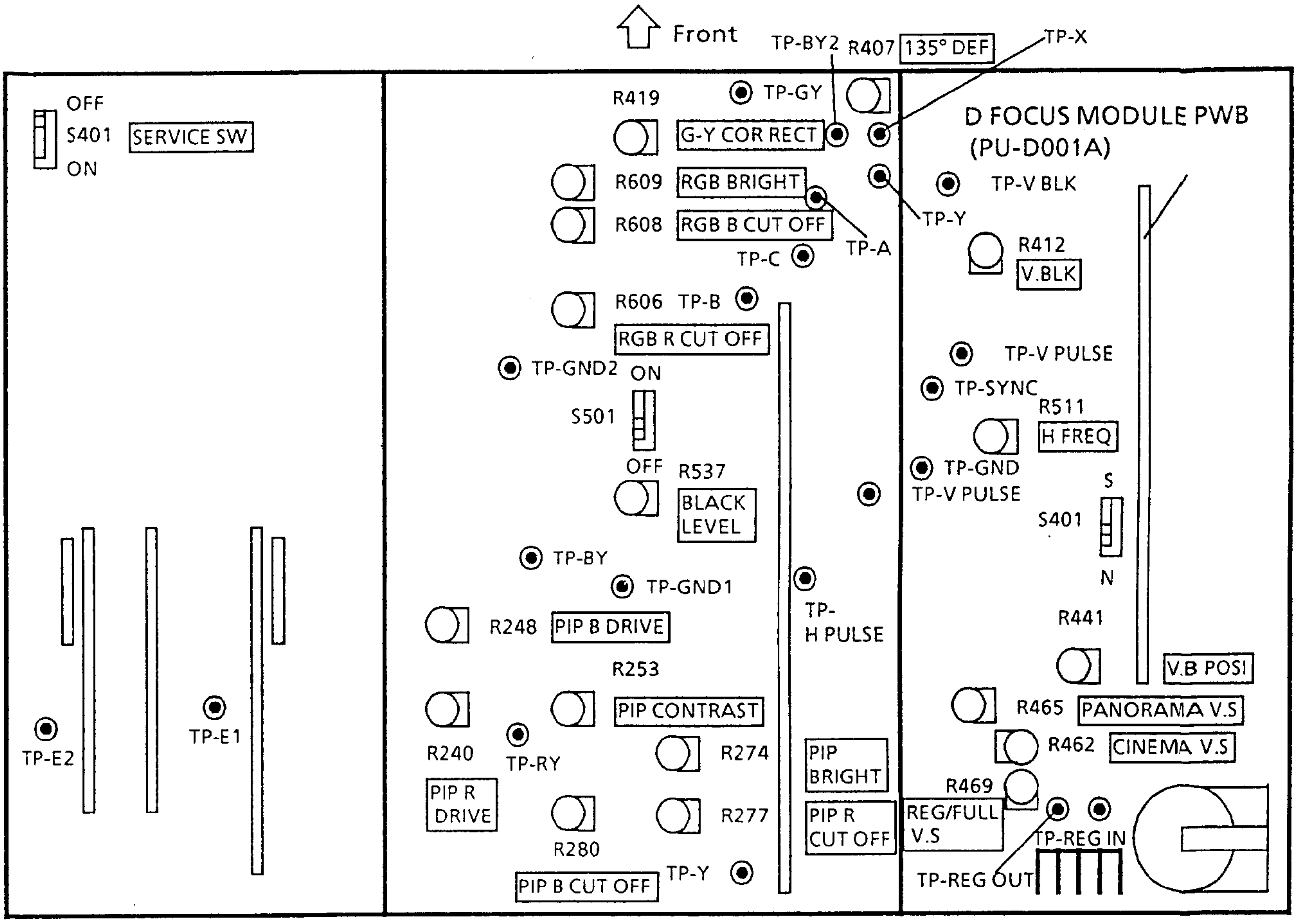
MTS PWB Ass'y (SGY-6001A)


S401
S402
OFF
ON
OFF
ON
TP-E
TP-101
R405
DIRECT GAIN
TP-102B
R313
TP-102C
COMB GAIN
TP-102A
R219
GAIN2
R318
R418
COMB PHASE
R216
PHASE2
2H DL GAIN
Front
R121
PHASE1
R132
Y.LEVEL
LOGICAL COMB PWB Ass'y (HZ-4201A)
TP-BY
TP-103
R124
GAIN1
TP-GND
R414
SUB TINT
R428
COLOR SYNC
TP-C
TP-V
R411
SUB COLOR
TP-Yout
TP-Y SYNC
TP-RY

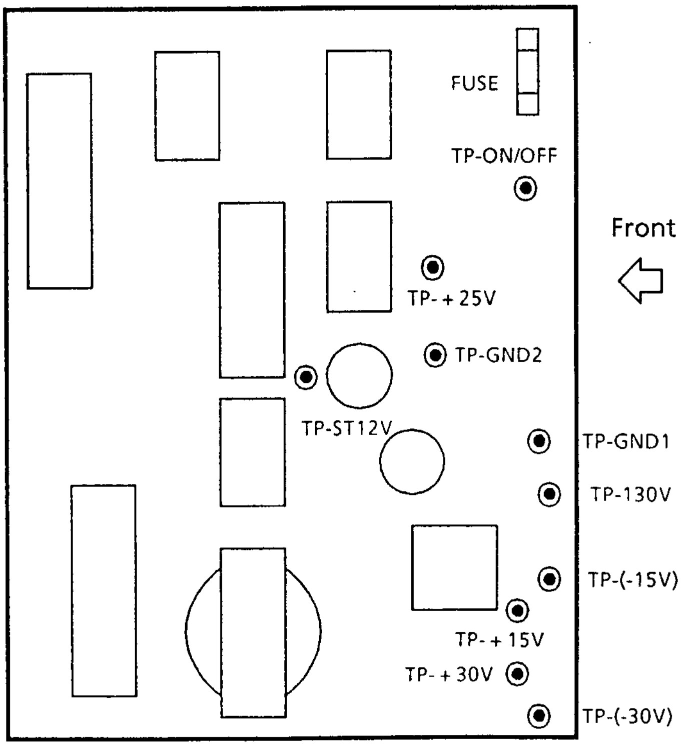
S INPUT PWB Ass'y (PU-1200A)


R605
PIP POSITION
T230
TP-RCK
R603
L-PIP POSITION
TP-2
T102
R607
R-PIP POSITION
TP-101
Front
TP-WCK
TP-1
TP-H1
TP-H2
R607
R605
R603
TP-BY1
EZ-X001A
TP-RY2
R725
TP-Y1
TP-RY1
TP-BY2
R720
PIP COLOR CONT.
R725
R-Y LEVEL CONT.
R722
PIP TINT CONT.
EZ-Y001A

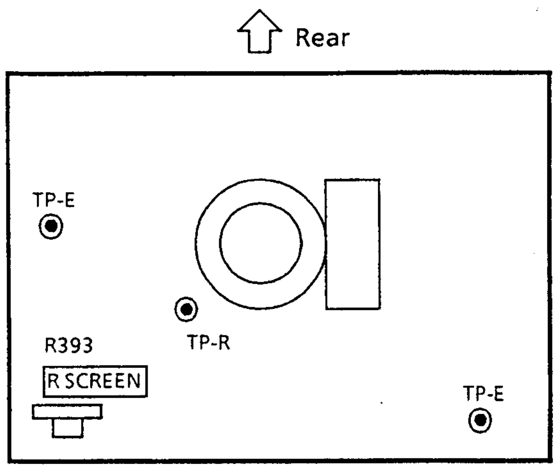
ASPECT PWB ASS'Y (EZ-1D002A)


Front
OFF
S401
SERVICE SW
ON
TP-E2
TP-E1
R419
TP-GY
G-Y COR RECT
TP-BY2
R407
135° DEF
TP-X
R609
RGB BRIGHT
R608
RGB B CUT OFF
TP-A
TP-C
TP-Y
R606
TP-B
RGB R CUT OFF
TP-GND2
ON
S501
OFF
R537
BLACK LEVEL
TP-BY
TP-GND1
R248
PIP B DRIVE
R253
PIP CONTRAST
R240
TP-RY
R274
PIP R DRIVE
R280
R277
PIP BRIGHT
PIP R CUT OFF
PIP B CUT OFF
TP-Y
TP-H PULSE
D FOCUS MODULE PWB (PU-D001A)
TP-V BLK
R412
V.BLK
TP-V PULSE
TP-SYNC
R511
H FREQ
TP-GND
TP-V PULSE
S
S401
N
R441
V.B POSI
R465
PANORAMA V.S
R462
CINEMA V.S
R469
REG/FULL V.S
TP-REG IN
TP-REG OUT

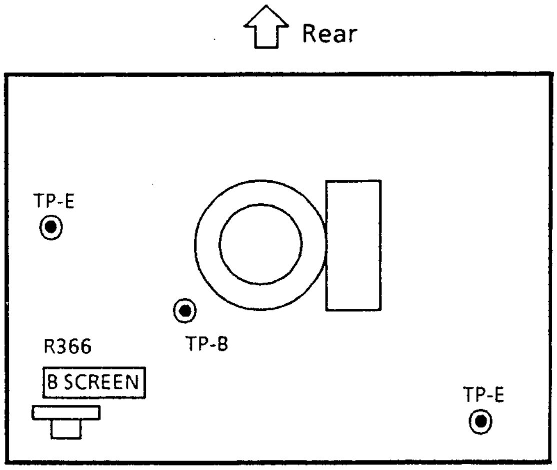
MICON PWB Ass'y (PU-7000A) VIDEO PWB Ass'y (PU-1000A) DEF PWB Ass'y (PU-2000A)


FUSE
TP-ON/OFF
Front
TP-+25V
TP-GND2
TP-ST12V
TP-GND1
TP-130V
TP-(-15V)
TP-+15V
TP-+30V
TP-(-30V)

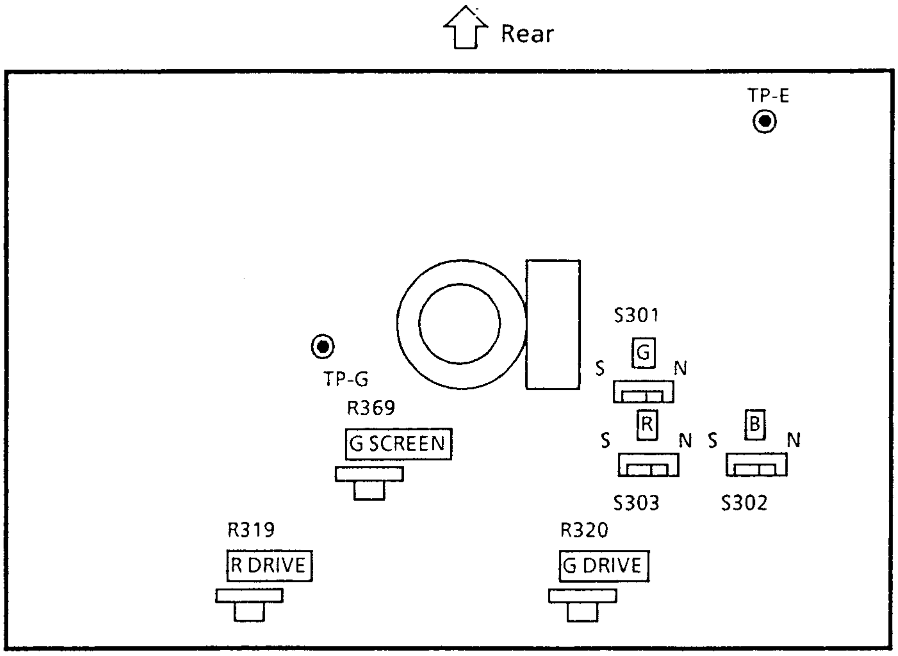
POWER PWB Ass'y (PU-9000A)


Rear
TP-E
TP-R
R393
R SCREEN
TP-E

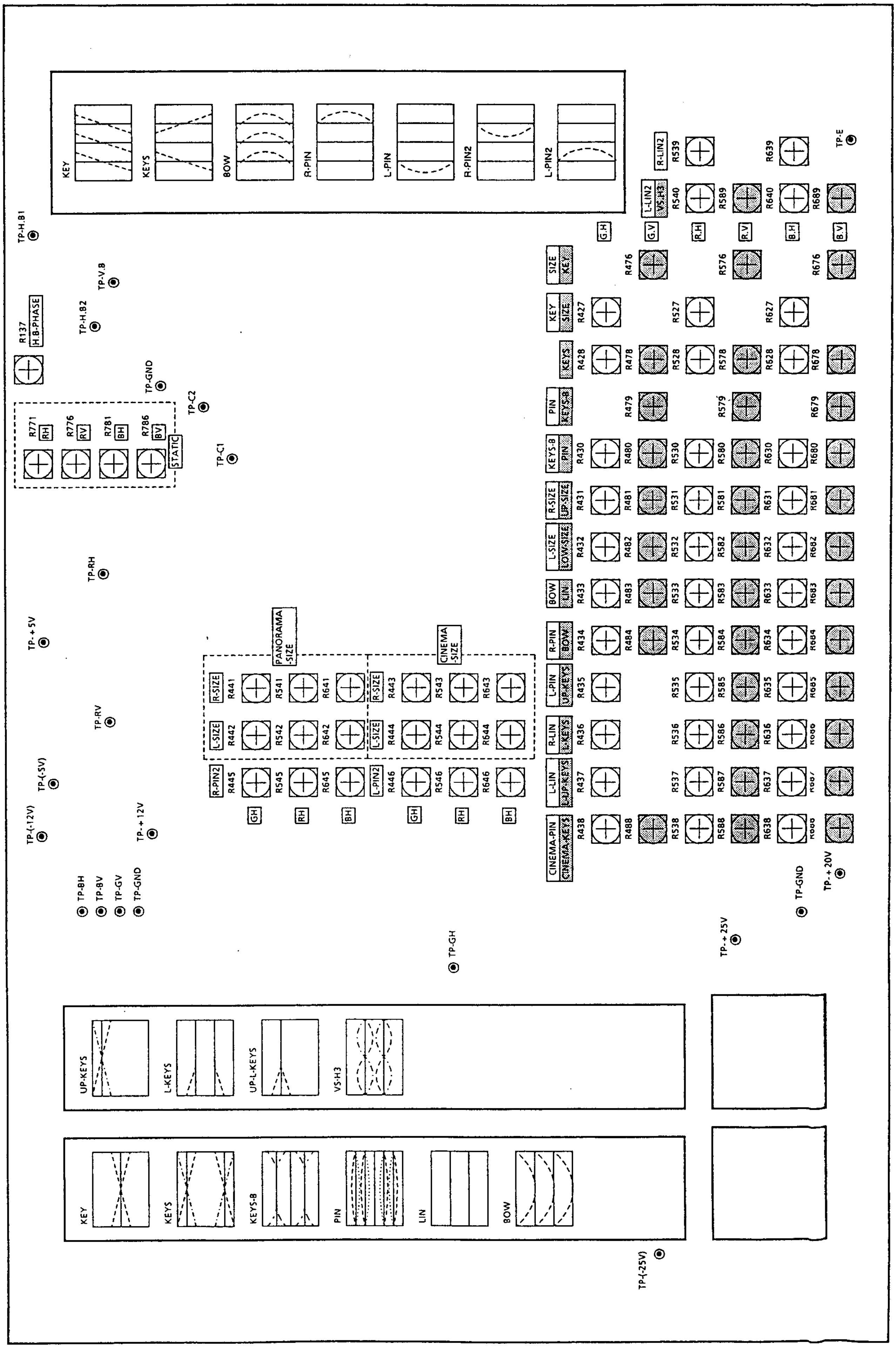
R CRT SOCKET PWB Ass'y (PU-3000A)(1/3)


Rear
TP-E
TP-B
R366
B SCREEN
TP-E

B CRT SOCKET PWB Ass'y (PU-3000A)(2/3)


Rear
TP-E
S301
G
S
N
TP-G
R369
G SCREEN
R
S
N
S
B
N
S303
S302
R319
R DRIVE
R320
G DRIVE

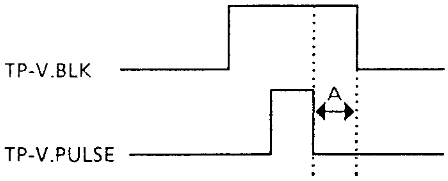
G CRT SOCKET PWB Ass'y (PU-3000A)(3/3)


KEY
KEYS
BOW
R-PIN
L-PIN
R-PIN2
L-PIN2
TP-H.B1
TP-V.B
TP-H.B2
R137
H.B-PHASE
TP-GND
TP-C2
TP-C1
R771
RH
R776
RV
R781
BH
R786
BV
STATIC
TP-RH
TP-+5V
TP-RV
TP-(-5V)
TP-(-12V)
TP-+12V
TP-BH
TP-BV
TP-GV
TP-GND
PANORAMA -SIZE
CINEMA -SIZE
R-SIZE
L-SIZE
R-PIN2
L-PIN2
R441
R541
R641
R442
R542
R642
R445
R545
R645
R443
R543
R643
R444
R544
R644
R446
R546
R646
GH
RH
BH
TP-GH
R-LIN2
L-LIN2
VS-H3
R539
R540
R639
R640
TP-E
R589
R689
G.H
G.V
R.H
R.V
B.H
B.V
SIZE
KEY
R476
R576
R676
R427
R527
R627
KEYS
R428
R478
R528
R578
R628
R678
PIN
KEYS-B
R479
R579
R679
R430
R480
R530
R580
R630
R680
R-SIZE
UP-SIZE
R431
R481
R531
R581
R631
R681
L-SIZE
LOW-SIZE
R432
R482
R532
R582
R632
R682
BOW
LIN
R433
R483
R533
R583
R633
R683
R-PIN
R434
R484
R534
R584
R634
R684
L-PIN
UP-KEYS
R435
R535
R585
R635
R685
R-LIN
L-KEYS
R436
R536
R586
R636
R686
L-LIN
L-UP-KEYS
R437
R537
R587
R637
R687
CINEMA-PIN
CINEMA-KEYS
R438
R488
R538
R588
R638
R688
TP-GND
TP-+20V
TP-+25V
TP-(-25V)
UP-KEYS
L-KEYS
UP-L-KEYS
VS-H3
KEY
KEYS
KEYS-B
PIN
LIN
BOW

CONVER PWB Ass'y (PU-8000A)

ADJUSTMENT STEP

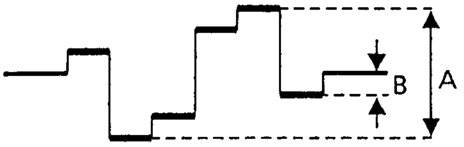
●DEF PWB assembly (PU-2000A)

No.	Item	Test equipment	Test points	Adjustment locations	Adjustment procedure
1.	Horizontal frequency	Crosshatch Remote controller	TP-SYNC (IC402-10PIN)	R511 (H FREQ)	1. With the remote controller, set Noise Mute to off. 2. Receive a crosshatch signal input. 3. Connect TP-SYNC and GND. 4. Adjust R511 (H FREQ) for straight vertical signal lines. 5. Remove the connection between TP-SYNC and GND. 6. Return Noise Mute to on.
2.	V blanking (during Panorama/Cinema mode)	Crosshatch Oscilloscope Remote controller	TP-V BLK TP-Pulse	R412 (V BLK)	1. With the remote controller, set the aspect mode to Panorama. 2. Receive a crosshatch signal input. 3. Connect channel 1 of a dual trace oscilloscope to TP-V BLK and channel 2 to TP-Pulse 4. Expand the display and adjust R412 (V BLK) so that period A is 0.9 ms. 

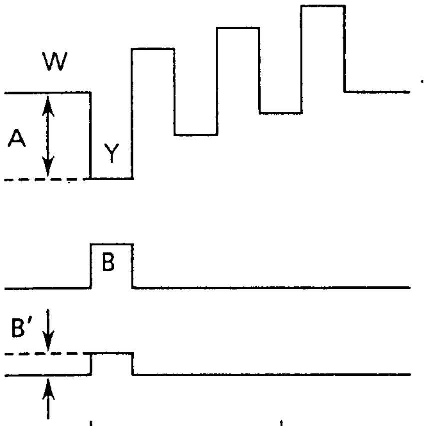
●Power PWB assembly (PU-9000A)

No.	Item	Test equipment	Test points	Adjustment locations	Adjustment procedure
1.	B1 voltage check	Digital voltmeter	TP-130V TP-GND1		Check for 130 ± 1 V between TP-130V and TP-GND1.

●S Input PWB assembly (PU-1200A)

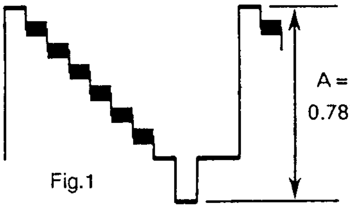
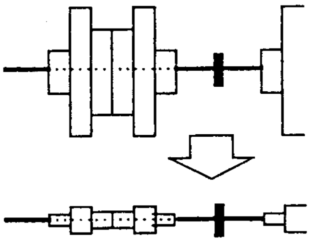
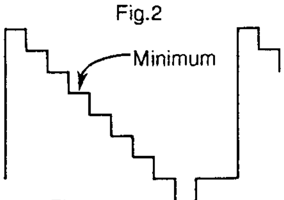
No.	Item	Test equipment	Test points	Adjustment locations	Adjustment procedure
1.	Color sync	Color bar		S401 S402 C428 (COLOR SYNC)	1. Receive a color bar signal input. 2. Set S401 and S402 to on. 3. Adjust C428 (COLOR SYNC) to where the color stripes form the color bar pattern which is essentially stationary. 4. Set S401 and S402 to off. 5. Change the channel or input signal, then again receive the color bar signal.Confirm that color sync is undisturbed and obtained immediately.
2.	Sub Color tint	Color bar Oscilloscope	TP-RY  	R414 (SUB TINT) R411 (SUB COLOR)	1. Receive a color bar signal. 2. Connect oscilloscope to TP-RY. 3. Turn R414 (SUB TINT) to obtain the waveform shown in the figure. 4. Turn R411 (SUB COLOR) to adjust amplitude A to 1.5 Vp-p. 5. Turn R414 (SUB TINT) to adjust amplitude B to 0.15 Vp-p. 6. Repeat steps 4 and 5 as required.

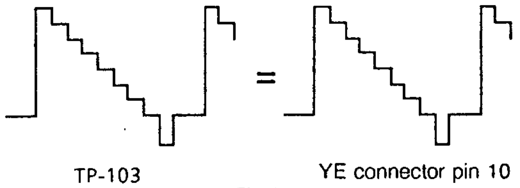
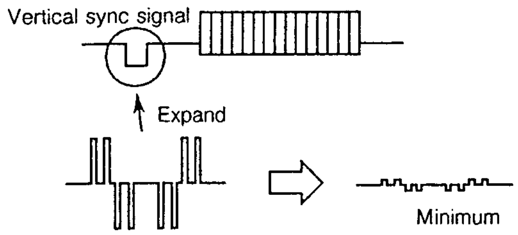
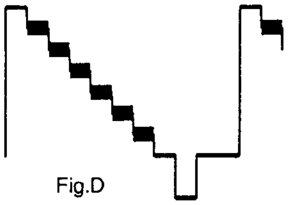
●Video PWB assembly (PU-1000A)

No.	Item	Test equipment	Test points	Adjustment locations	Adjustment procedure
1.	Dynamic matrix 135 degree detection level, G-Y correction amount	Color bar Oscilloscope Remote controller	TP-A (+) TP-B (+) TP-C (-). TP-X TP-Z TP-BY2 TP-GY  	R419 (G-Y CORRECT) R407 (135 DEGREES DEF) S501	1. Connect 10 µF/16 V electrolytic capacitors between TP-A (+) and TP-C (-) and between TP-B (+) and TP-C (-).Connect a 1 kohm resistor between TP-X and TP-Z. 2. Receive a color bar signal. 3. Select the color adjust position with the remote controller Function keys. 4. Set S501 on and connect oscilloscope to TP-BY2.Adjust color density with the remote controller so that the distance A between W and Y is 0.2 Vp-p. 5. Turn R419 (G-Y CORRECT) fully clockwise.Turn R407 (135 DEGREES DEF) fully counter-clockwise, then gradually turn it clockwise to where amplitude just begins to appear (B' in figure). 6. Connect oscilloscope to TP-GY.Adjust the color density to the point B clip begins.Adjust R419 (G-Y CORRECT) for 30 mVp-p (B' in figure). 7. Return S501 to off and color density to the standard position.Remove the capacitors and resistor of step 1.

No.	Item	Test equipment	Test points	Adjustment locations	Adjustment procedure
2.	PIP cutoff, highlight, white balance	Crosshatch Full white Remote controller		R277 (PIP R CUT OFF) R280 (PIP B CUT OFF) R240 (PIP R DRIVE) R248 (PIP B DRIVE)	1. Set to the PIP mode with the remote controller. 2. Receive a crosshatch signal. 3. With the remote controller, set brightness to maximum. 4. Adjust R277 (PIP R CUT OFF) and R280 (PIP B CUT OFF) to obtain the same low light (black) balance in the main and sub pictures. 5. Receive a full white signal. 6. Adjust R240 (PIP R DRIVE) and R248 (PIP B DRIVE) to obtain the same white balance in the main and sub pictures. 7. Return the brightness to the standard (center) setting.
3.	PIP bright, contrast	Crosshatch Full white Remote controller		R274 (PIP BRIGHT) R253 (PIP CONTRAST)	1. Set to the PIP mode with the remote controller. 2. Receive a crosshatch signal. 3. Adjust R274 (PIP BRIGHT) to obtain the same brightness in the main and sub pictures. 4. Receive a full white signal. 5. With the remote controller, set brightness to maximum. 6. Adjust R253 (PIP CONTRAST) to obtain the same contrast in the main and sub pictures. 7. Return the brightness to the standard (center) setting.

●Comb filter module (HZ-4201A)

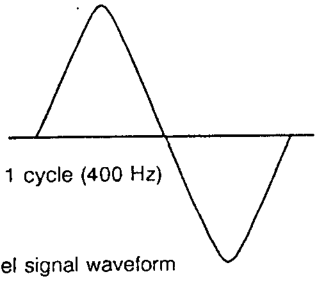
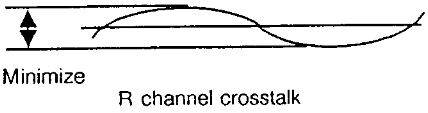
No.	Item	Test equipment	Test points	Adjustment locations	Adjustment procedure
1.	Comb filter  Fig.1  Fig.2  Fig.3	Color bar Oscilloscope (H-rate 10:1)	TP-103 TP-102A TP-102B TP-120C	R132(Y LEVEL) R121(PHASE1) R124(GAIN1) R216(PHASE2) R219(GAIN2) R318 (COMB PHASE) R313 (COMB GAIN)	1. Receive a color bar signal (0.78 Vp-p). 2. Connect pin 7 of the YE connector to ground. 3. Connect oscilloscope to TP-103.Adjust R132 (Y GAIN) for 0.78 Vp-p between sync tip and white (A in Fig.1). 4. Connect channel 1 of a dual trace oscilloscope to TP-102A and channel 2 to TP-102B. 5. Add CH2 to CH1 and use the minimum voltage range.Adjust R121 (PHASE 1) and R124 (GAIN 1) to minimize the waveform amplitude (color signal component).See Fig.2 6. Connect oscilloscope CH 1 to TP-102A and CH 2 to TP-102C.Subtract CH 2 from CH 1 (set CH 2 to invert and add to CH 1) and use the minimum voltage range. 7. Adjust R219 (GAIN 2) and R318 (COMB PHASE) to minimize the waveform amplitude (color signal component). 8. Disconnect the oscilloscope from TP-102A and TP-102C, and connect it to TP-103.Adjust R318 (COMB PHASE) and R313 (COMB GAIN) to minimize the waveform amplitude (color signal component).See Fig.3.Use the lowest oscilloscope voltage range possible for this adjustment.

No.	Item	Test equipment	Test points	Adjustment locations	Adjustment procedure
2.	Vertical contour correction	Color bar Stabilized DC power supply Oscilloscope (V-rate 10:1)	TP-101 TP-103 TP-Y.SYNC [S INPUT PWB ASS'Y]	R405(DIRECT GAIN) R418(2H DL GAIN)	1. Receive a color bar signal. 2. Connect a dual trace oscilloscope to TP-103 and TP-Y Sync.Confirm that signals are the same (Fig.A). 3. Connect a stabilized DC power supply to pin 7 of the YE connector and apply 3.5 V DC bias. 4. Connect oscilloscope to TP-101.Expand the display to easily observe the area between Y sync and the start of the video signal (Fig.B). 5. Adjust R405 (DIRECT GAIN) and R418 (2H DL GAIN) for minimum video signal component, which the vertical contour correction signal is symmetrical top and bottom. 6. Apply 2 V DC bias to pin 7 of the YE connector. 7. Confirm minimum vertical contour correction signal (Fig.C) 8. Connect a stabilized DC power supply to pin 7 of the YF connector and apply 4 V DC bias. 9. Connect oscilloscope to TP-103 and confirm composite video signal output (Fig.D).
		 Fig.A  Fig.B Fig.C  Fig.D			

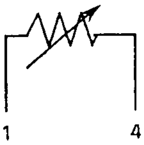
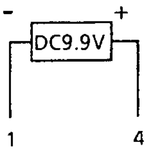
●MTS module (SGY-6001A) Do not adjust without proper test equipment.

No.	Item	Test equipment	Test points	Adjustment locations	Adjustment procedure
1.	Audio multiplex FH filter	MTS generator Oscilloscope	IC601 pin 39 IC601 pin 42 IC601 pin 40	R626(MOD.F300Hz) R627(MOD.F3KHz) R628(FILTER) R629(VCO)	1. Supply a 97.55 kHz -14.4 dBm (147 mVrms) sinewave to IC601 pin 39.Adjust R628 (FILTER) for minimum output from pin 42. 2. Supply 15.734 kHz -24 dBm (49 mVrms) to IC601 pin 39.Adjust R629 (VCO) so that the DC voltage at pin 40 is the same with and without supplying the signal (tolerance ± 0.04 V). 3. Supply a 100 Hz mono 100 % signal to IC601 in 39.Set the input voltage for 245 mVrms. 4. Supply a composite signal (30 % modulation 300 Hz L-only with dBx NR) input and adjust R626 (MOD F300Hz) for minimum output from connector pin 11.Change the modulation frequency to 3 kHz and adjust R627 (MOD F3kHz) for minimum output from connector pin 11.

●Receiver PWB assembly (PU-1100A)

No.	Item	Test equipment	Test points	Adjustment locations	Adjustment procedure
1.	Audio multiplex separation	TV audio multiplex signal generator Oscilloscope Remote controller Fig.1  L channel signal waveform Fig.2 	Audio output left terminal Audio output right terminal		1. Set a TV audio multiplex signal generator for stereo and supply a 400 Hz signal from the left channel output. 2. Connect oscilloscope to the left audio output terminal and adjust to easily observe 1 cycle of the 400 Hz waveform (Fig.1). 3. Connect the oscilloscope to the right audio output terminal and expand the voltage axis. 4. Adjust R601 (Separation) to minimize 400 Hz crosstalk (Fig.2).

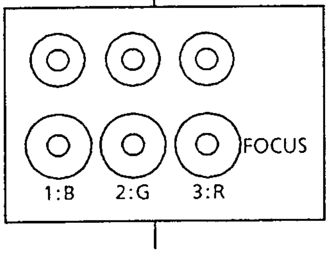
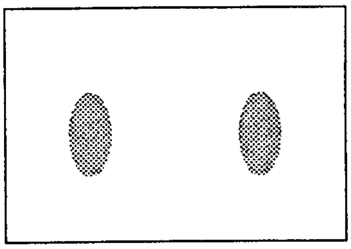
●DEF PWB assembly (PU-2000A)

No.	Item	Test equipment	Test points	Adjustment locations	Adjustment procedure
1.	High voltage X-ray protector check	Crosshatch High voltage meter Remote controller  [EE]コネクタ	Focus pack spare terminal	 [EG]コネクタ	1. Confirm that power supply is cut off. 2. Connect a high voltage meter to the spare terminal of the focus pack. 3. Supply power. 4. Use the remote controller to set the aspect mode to full. 5. Confirm a reading between 31 - 32kV on the high voltage meter. 6. Connect a 500kΩ potentiometer to the EE connector. 7. Turn the potentiometer between 500kΩ and 0Ω and confirm HV shutdown operation(does not operate at less than 32.5kV). 8. If the voltage cannot be raised above 34kV,apply DC9.9V to the EG connector pins 1(-) and 4(+) and confirm HV shutdown operation. 9. Disconnect the power cord plug from AC. 10.Remove the potentiometer and power supply connections from connectors EE and EG. 11.Again connect the power cord plug to AC.

●Receiver PWB assembly (PU-1100A)

No.	Item	Test equipment	Test points	Adjustment locations	Adjustment procedure
1.	Noise			R103(NOISE)	1. Turn R103 (NOISE) to obtain noise in the picture (adjustable from AV board at rear of set; hole above Audio Out Variable R). 2. Slowly turn R103 and stop where the noise disappears. 3. Confirm absence of abnormality on other channels.

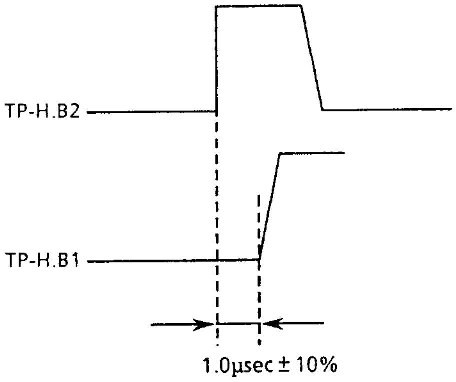
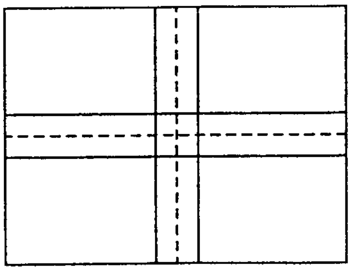
●CRT socket PWB assembly (PU-3000A)

No.	Item	Test equipment	Test points	Adjustment locations	Adjustment procedure
1.	Lens and CRT focus	Crosshatch Dot signal Remote controller   Screen positions		Lens focus screw S301 (G SERVICE SW) S302 (B SERVICE SW) S303 (R SERVICE SW) Red focus Green focus Blue focus [Focus pack]	1. With the remote controller, set the aspect mode to cinema. 2. Receive a crosshatch signal. 3. Set the green and blue service switches to S to produce the single red color. 4. Adjust the lens focus screw of the lens assembly for optimum focus in the central area of the screen 5. In the same manner, adjust green and blue.For green adjustment, set only the green service switch to N, likewise, set only the blue service switch to N for blue adjustment. 6. Receive a dot signal. 7. Set the green and blue service switches to S to produce the single red color. 8. Turn the red focus VR clockwise to where the beam spot diameter is about 30 mm. 9. Mutually turn the two 4-pole magnets and adjust to produce an elliptical shaped beam spot at the center of the screen. 10. Return the red focus VR to its original position. 11. Mutually turn the two 2-pole magnets and adjust to minimize the spot flare. 12. In the same manner, adjust green and blue. 13. Adjust the red and green focus VRs for optimum crosshatch horizontal lines at the center left and right portions of the screen (see figure). 14. Adjust the blue focus VR for darkest black components. 15. Repeat above steps 2 - 13 to obtain optimum focus.

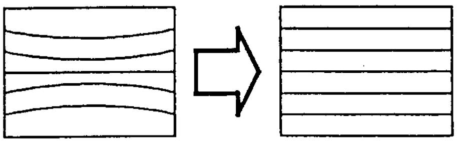
●DEF PWB assembly (PU-2000A)

No.	Item	Test equipment	Test points	Adjustment locations	Adjustment procedure
1.	Regular V size coarse adjustment	crosshatch Remote controller		R469(REG/FULL V.S) S302(B SERVICE SW) S303(R SERVICE SW) [CRT SOCKET PWB Ass'y]	1. Use the remote controller to set the aspect mode to regular. 2. Receive a crosshatch signal. 3. Set the red and blue service switches to S to produce a single green color. 4. Adjust R469(REG/FULL V.S) so that the top and bottom lines of the crosshatch are equal.

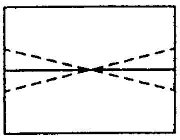
●Conver PWB assembly (PU-8000A)

No.	Item	Test equipment	Test points	Adjustment locations	Adjustment procedure
1.	Convergence Preparatory 1 (H.blanking)	Oscilloscope (2V/div 1µsec/div)	TP-H.B1 TP-H.B2	R137(H.B-PHASE)	1. Connect channel 1 of a dual trace oscilloscope to TP-H.B1 and channel 2 to TP-H.B2. 2. Adjust R137(H.B-PHASE) so that TP-H.B2 is advanced 1.0µsec ± 10% with respect to TP-H.B1. 
2.	Convergence Preparatory 1 (Centering magnets)	Crosshatch Remote controller			1. Use the remote controller to set the aspect mode to full. 2. Receive a crosshatch signal. 3. Adjust the RGB centering magnets to overlap the center horizontal and vertical lines. 4. First adjust the green image center position with the centering magnet. 5. Then adjust red and blue in the same manner. If they cannot be overlapped,overlap the horizontal lines,then bring the vertical lines as close as possible to the green center. 

No.	Item	Test equipment	Test points	Adjustment locations	Adjustment procedure
3.	Green convergence (G.V)	Crosshatch Remote controller		R480(PIN) R481(UP-SIZE) R482 (LOW-SIZE) R483(LIN) R476(KEY) R478(KEYS) R484(BOW) R479(KEYS-B) S302(B SERVICE SW) S303(R SERVICE SW) [CRT SOCKET PWB Ass'y]	1. With the remote controller, set the aspect mode to full. 2. Receive a crosshatch signal. 3. Set the red and blue service switches to S to produce the single green color. 4. Adjust R480 (PIN) for flat horizontal crosshatch lines. 5. Adjust for crosshatch top and bottom symmetry with R481 (UP-SIZE) and R482 (LOW-SIZE).If necessary, also adjust R483 (LIN). 6. Refer to the figures and adjust for uniform size of the crosshatch horizontal squares.

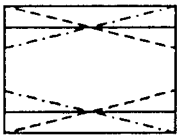


① KEY
R476



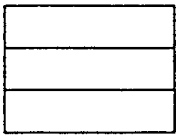
Horizontal line left-right balance

② KEYS
R478



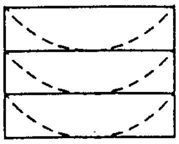
Horizontal line keystone distortion

③ LIN



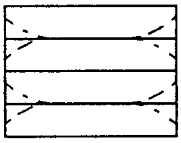
Top and bottom width balance

④ BOW
R484



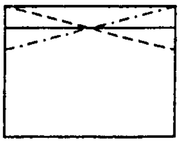
Horizontal line slackening

⑤ KEYS-B
R479



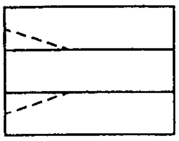
Keystone distortion near left and right edges

⑥ UP-KEYS



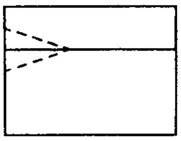
Horizontal line keystone distortion

⑦ L-KEYS



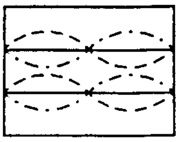
Left side keystone distortion

⑧ L-UP-KEYS



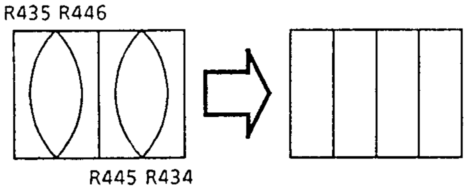
Top left keystone distortion

⑨ VS·H3

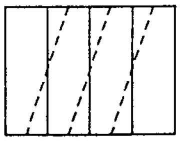


Horizontal line 3 dimensional distortion

No.	Item	Test equipment	Test points	Adjustment locations	Adjustment procedure
4.	Green convergence (G.H)	Crosshatch Remote controller		R434(R-PIN) R435(L-PIN) R445(R-PIN2) R446(L-PIN2) R441(R-SIZE) R442(L-SIZE) R436(R-LIN) R437(L-LIN) R427(KEY) R428(KEYS) R433(BOW) S302(B SERVICE SW) S303(R SERVICE SW) [CRT SOCKET PWB Ass'y]	1. With the remote controller, set the aspect mode to full. 2. Receive a crosshatch signal. 3. Set the red and blue service switches to S to produce the single green color. 4. Adjust R434 (H PIN-R) and R435 (H PIN-L) for straight crosshatch vertical lines.Adjust the picture center area with R445 (H PIN-CR) and R446 (H PIN-CL). 5. Adjust for left and right crosshatch symmetry with R441 (R SIZE) and R442 (L SIZE).If necessary, also adjust R436 (R LIN) and R437 (L LIN). 6. Refer to the figures and adjust for uniform size of the crosshatch vertical squares.

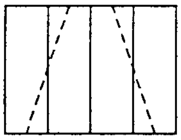


① KEY
R427



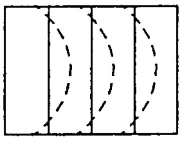
Vertical line top and bottom balance

② KEYS
R428



Vertical line keystone distortion

③ BOW
R483



Vertical line left-right slackening

●DEF PWB assembly (PU-2000A)

No.	Item	Test equipment	Test points	Adjustment locations	Adjustment procedure
1.	Cinema and panorama V size and centering	Crosshatch Remote controller		R462(CINEMA V.S) R465(PANORAMA V.S)	1. Receive a crosshatch signal. 2. With the remote controller, set the aspect mode to cinema. 3. Adjust R462 (CINEMA V SIZE) to set the vertical amplitude to 70 ± 1 %. 4. With the remote controller, set the aspect mode to panorama. 5. Adjust R465 (PANORAMA V SIZE) to set the vertical amplitude to 82.5 ± 1 %.

●Conver PWB assembly (PU-8000A)

No.	Item	Test equipment	Test points	Adjustment locations	Adjustment procedure
1.	Green convergence (Cinema/Panorama)	Crosshatch Remote controller		R488(CINEMA-KEYS)) R438(CINEMA-PIN) R443(CINEMA R-SIZE) R444(CINEMA L-SIZE) R441(PANORAMA R-SIZE) R442(PANORAMA L-SIZE) R480(PIN) R434(R-PIN) R435(L-PIN) R445(R-PIN2) R446(L-PIN2)	1. With the remote controller, set the aspect mode to cinema. 2. Receive a crosshatch signal. 3. Set the red and blue service switches to S to produce the single green color. 4. Adjust R488 (H KEYSTONE) for flat horizontal crosshatch lines. 5. Adjust R438 (SIDE PIN) for straight crosshatch vertical lines. 6. To obtain crosshatch top and bottom symmetry, adjust R443 (H CINEMA SIZE-R) and R444 (H CINEMA SIZE-L). 7. With the remote controller, set the aspect mode to panorama. 8. To obtain crosshatch top and bottom symmetry, adjust R441 (H PANORAMA SIZE-R) and R442 (H PANORAMA SIZE-L). 9. So that the crosshatch horizontal and vertical lines are straight and perpendicular, adjust R480 (TOP/BOTTOM PIN), R434 (SIDE PIN), R435 (SIDE PIN), R445 (SIDE PIN) and R446 (SIDE PIN).
2.	Red convergence (R.V)	Crosshatch Remote controller		R580(PIN) R578(KEYS) R581(UP-SIZE) R582 (LOW-SIZE) R583(LIN) R585(UP-KEYS) R586(L-KEYS) R587(L-UP-KEYS) R589(VS·H3) R576(KEY) R579(KEYS-B) R584(BOW) S302(B SERVICE SW) [CRT SOCKET PWB Ass'y]	1. With the remote controller, set the aspect mode to full. 2. Receive a crosshatch signal. 3. Set the blue service switch to S to produce red and green colors. 4. Adjust R580 (RV PIN) and R578 (V KEYS) for flat crosshatch horizontal lines. 5. Adjust R581 (UP SIZE), R582 (LOW SIZE), R583 (RV LIN) and R585 (UP KEY) to overlap the red and green crosshatch squares. 6. Refer to the figures for green convergence adjustment and adjust R576 (KEY), R589 (KEYS-B) and R584 (BOW) for uniform horizontal crosshatch square size.

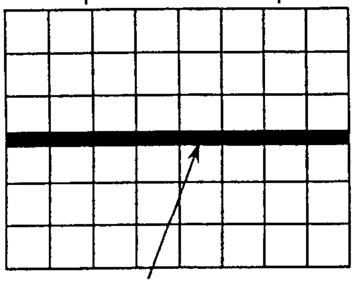
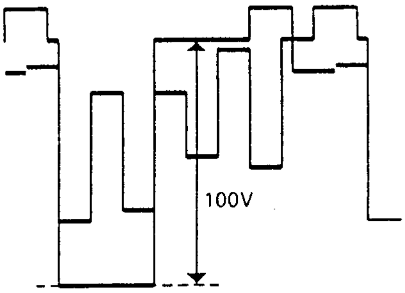
No.	Item	Test equipment	Test points	Adjustment locations	Adjustment procedure
3.	Red convergence (R.H)	Crosshatch Remote controller		R534(R-PIN) R535(L-PIN) R545(R-PIN2) R546(L-PIN2) R531(R-SIZE) R532(L-SIZE) R536(R-LIN1) R537(L-LIN1) R539(R-LIN2) R540(L-LIN2) R771(RH STATIC) R527(KEY) R530(KEYS-B) R533(BOW) S302(B SERVICE SW) [CRT SOCKET PWB Ass'y]	1. With the remote controller, set the aspect mode to full. 2. Receive a crosshatch signal. 3. Set the blue service switch to S to produce red and green colors. 4. To obtain perpendicular crosshatch vertical lines, adjust R534 (H PIN-R), R535 (H PIN-L), R545 (H PIN-CR) and R546 (H PIN-CL).If necessary, also adjust R528 (KEYS). 5. To overlap the crosshatch red and green squares, adjust R531 (R SIZE), R532 (L SIZE), R536 (R LIN1), R537 (L LIN1), R539 (R LIN2), R540 (L LIN2) and R771 (RH STATIC). 6. Refer to the figures for green convergence adjustment and adjust R576 (KEY), R589 (KEYS-B) and R584 (BOW) for uniform horizontal crosshatch square size.
4.	Red convergence (Cinema/Panorama)	Crosshatch Remote controller		R588(CINEMA-KEYS) R538(CINEMA-PIN) R543(CINEMA R-SIZE) R544(CINEMA L-SIZE) R541(PANORAMA R-SIZE) R542(PANORAMA L-SIZE)	1. With the remote controller, set the aspect mode to cinema. 2. Receive a crosshatch signal. 3. Set the blue service switch to S to produce the red and green colors. 4. Adjust R588 (CINEMA-KEYS) for flat crosshatch horizontal lines. 5. Adjust R538 (SIDE PIN) for perpendicular crosshatch vertical lines. 6. Adjust crosshatch top and bottom symmetry with R543 (H CINEMA SIZE-R) and R544 (H CINEMA SIZE-R). 7. With the remote controller, set the aspect mode to panorama. 8. Adjust crosshatch top and bottom symmetry with 541 (H PANORAMA SIZE-R) and R542 (H PANORAMA SIZE-R).

No.	Item	Test equipment	Test points	Adjustment locations	Adjustment procedure
5.	Blue convergence (BH, BV, Panorama/Cinema)	Crosshatch Remote controller		R680(PIN) R678(KEY) R685(UP-KEYS) R686(L-KEYS) R687(L-UP-KEYS) R681(UP-SIZE) R682(LOW-SIZE) R683(LIN) R786(BV STATIC) R676(KEY) R679(KEYS-B) R684(BOW) R689(VS.H3) R634(R-PIN) R635(L-PIN) R645(R-PIN2) R646(L-PIN2) R639(R-LIN2) R640(L-LIN2) R636(R-LIN) R637(L-LIN) R631(R-SIZE) R632(L-SIZE) R781(BH STATIC) R627(KEY) R630(KEYS-B) R633(BOW) R688(CINEMA-KEYS) R638(CINEMA-PIN) R643(CINEMA R-SIZE) R644(CINEMA L-SIZE) R641(PANORAMA R-SIZE) R642(PANORAMA L-SIZE)	1. Receive a crosshatch signal. 2. Set the red, blue and green service switches to N. 3. Refer to Red convergence (R.V), Red convergence (R.H) and Red convergence (Cinema/Panorama) and perform adjustment in the same manner.
6.	Convergence, static adjustment				Refer to the Installation adjustment section of the Installation procedure.

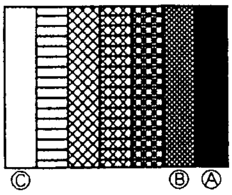
●DEF PWB assembly (PU-2000A)

No.	Item	Test equipment	Test points	Adjustment locations	Adjustment procedure
1.	Black level reverse blanking, V pulse position	Crosshatch		S401 (Black level reverse blanking, V pulse position sub) R441(V.BLK.POSI)	1. With the remote controller, set the aspect mode to cinema. 2. Receive a crosshatch signal. 3. Set S401 to the service (S) mode. 4. Adjust R441 (V. BLK.POSI) so that V blanking is symmetrical top and bottom. 5. Return S401 to the normal mode.

●Micon PWB assembly (PU-7000A)

No.	Item	Test equipment	Test points	Adjustment locations	Adjustment procedure
1.	Sub-bright standard setting	Crosshatch Remote controller	 Vertical blanking period	S401(SERVICE SW) R801 (V HOLD) [inside front panel]	1. Receive a crosshatch signal. 2. With the remote controller, select Theater/AV Status (2) and set the aspect mode to full. 3. Set S401 to the service mode. 4. Turn R801 (V HOLD) to position the vertical blanking period at the center of the picture. 5. With the remote controller Function up/down keys, select B (bright). 6. Use the Function + and - keys and set to just before the vertical blanking period brightens (avoid setting too bright). 7. Return S401 to the normal mode.
2.	Contrast level standard setting	Oscilloscope Split color bar remote controller		S401(SERVICE SW)	1. Receive a split color bar signal. 2. With the remote controller, select Theater/AV Status (2) and set the aspect mode to full. 3. Set S401 to the service mode. 4. Connect oscilloscope to TP-B. 5. With the remote controller Function up/down keys, select P (picture). 6. Use the Function + and - keys to adjust the 100 % white waveform component for 100 Vp-p. 7. Return S401 to the normal mode.

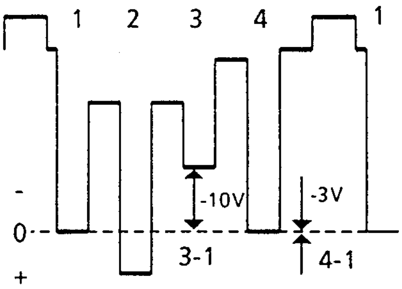
●CRT socket PWB assembly (PU-3000A)

No.	Item	Test equipment	Test points	Adjustment locations	Adjustment procedure
1.	Screen contrast	Greyscale (Color bar luminance only ok)		R393(R SCREEN) R366(B SCREEN) R369(G SCREEN)	1. Receive a greyscale signal. 2. Set R, G, B screen VRs to minimum. 3. Gradually turn the RGB screen VRs and adjust for the following conditions. a) Difference begins to appear between black segment A and next darkest segment B. b) White segment C is white. 4. Perform highlight adjustment.
2.	White balance, highlight	Split color bar Remote controller		R319(R DRIVE) R320(G DRIVE)	1. Supply a split color bar signal input. 2. With the remote controller, set the aspect mode to full. 3. Adjust R319 (R DRIVE) and R320 (G DRIVE) so that the 100 % white component is white. 4. Check the low light.If disturbed, readjust low light. 5. Repeat low light and highlight adjustments.

●Video PWB assembly (PU-1000A)

No.	Item	Test equipment	Test points	Adjustment locations	Adjustment procedure
1.	Black level correction, detector level	Oscilloscope Crosshatch Remote controller	TP-B [CRT SOCKET PWB Ass'y]	R537(BLACK LEVEL)	1. Receive a crosshatch signal. 2. With the remote controller, select Theater/AV Status (2) and set the aspect mode to full. 3. Connect oscilloscope to TP-B. 4. Set R537 (BLACK LEVEL) fully clockwise, then turn it counter-clockwise and adjust the crosshatch signal black level for DC 2 V as measured with the oscilloscope.

●CRT socket PWB assembly (PU-3000A)

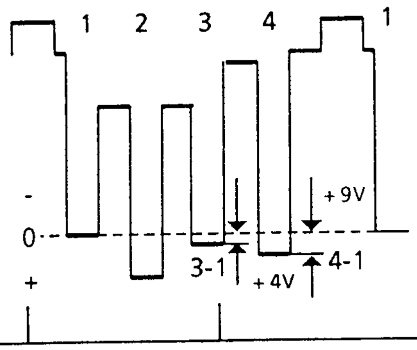
No.	Item	Test equipment	Test points	Adjustment locations	Adjustment procedure
1.	Color, tint	Color bar Oscilloscope Remote controller	TP-B  1 2 3 4 1 - 0 + -10V -3V 3-1 4-1	S401(SERVICE SW) [MICON PWB ASS'Y]	1. Receive a color bar signal. 2. With the remote controller, select Theater/AV Status (2) and set the aspect mode to full. 3. Set S401 to the service mode. 4. Connect oscilloscope to TP-B. 5. Press the remote controller Display key.Select Tint (T) with the Function up/down keys.Use the Function + and - keys to adjust for -10 V between 3 and 1. 6. Select Color (C) with the Function up/down keys.Use the Function + and - keys to adjust for -3 V between 4 and 1. 7. Return S401 to the normal mode.

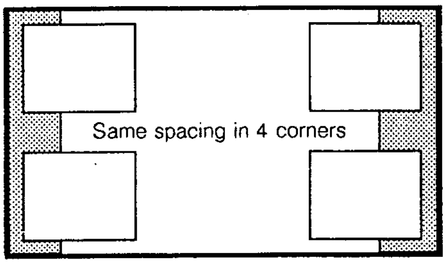
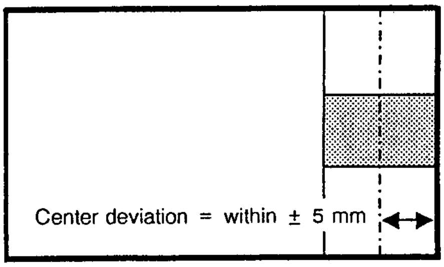
●Video PWB assembly (PU-1000A)

No.	Item	Test equipment	Test points	Adjustment locations	Adjustment procedure
1.	PIP cutoff, white balance, highlight	Crosshatch Full white Remote controller		R277(PIP R CUT OFF) R280(PIP B CUT OFF) R240(PIP R DRIVE) R248(PIP B DRIVE)	1. Select the PIP mode with the remote controller. 2. Receive a crosshatch signal (also in sub picture). 3. While observing the pictures, adjust R277 (PIP R CUTOFF) and R280 (PIP B CUTOFF) for equal low light (black) balance in the main and sub pictures. 4. Receive a full white signal. 5. While observing the pictures, adjust R240 (PIP R DRIVE) and R248 (PIP B DRIVE) for equal white balance in the main and sub pictures.

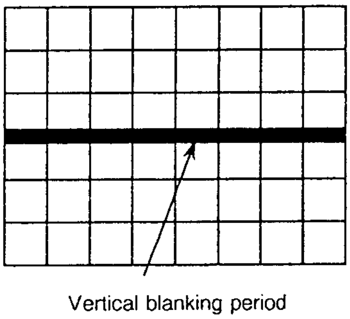
No.	Item	Test equipment	Test points	Adjustment locations	Adjustment procedure
2.	PIP bright, contrast	Crosshatch Full white Remote controller		R274(PIP BRIGHT)	1. With the remote controller, select Theater/AV Status (2) and set the aspect mode to full. 2. Receive a crosshatch signal with the remote controller. 3. Set for the PIP mode. 4. While observing the pictures, adjust R274 (PIP BRIGHT) for equal brightness in the main and sub pictures. 5. Receive a full white signal. 6. While observing the pictures, adjust R253 (PIP CONTRAST) for equal contrast in the main and sub pictures.

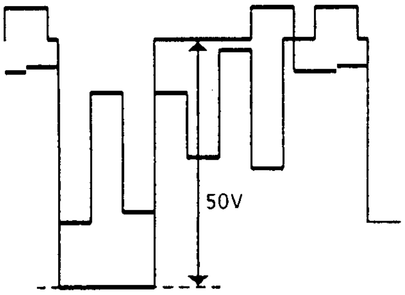
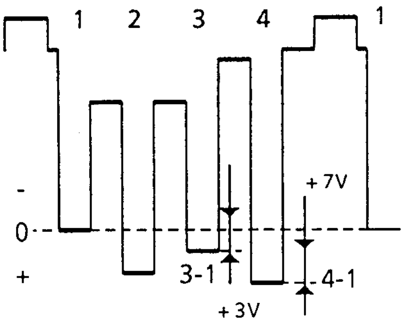
●Aspect PWB assembly (EZ-1D002A)

No.	Item	Test equipment	Test points	Adjustment locations	Adjustment procedure
1.	PIP, color, tint	Color bar Oscilloscope Remote controller	TP-B TP-R [CRT SOCKET PWB ASS'Y]  	R725(PIP R-Y LEVEL CONT.) R722(PIP TINT CONT.) R720(PIP COLOR CONT.)	1. Receive a color bar signal. 2. With the remote controller, select Theater/AV Status (2) and set the aspect mode to full. 3. Set for the PIP mode. 4. Connect oscilloscope to TP-B. 5. Turn R725 (PIP R-Y LEVEL) fully clockwise. 6. Adjust R722 (PIP TINT) for +4 V between 3 and 1. 7. Adjust R720 (PIP COLOR) for +9 V between 4 and 1. 8. Connect oscilloscope to TP-R. 9. Adjust R725 (PIP R-Y LEVEL) equal level in the main and sub pictures.

No.	Item	Test equipment	Test points	Adjustment locations	Adjustment procedure
2.	PIP/POP position	Crosshatch Remote controller	 Fig.1  Fig.2	R605(PIP POSITION) R607(R-POP-POSITION) R603(L-POP-POSITION)	Note: Be sure to perform the following adjustments after replacing the aspect converter board.Correct the sub picture position if deviated. 1. Receive a crosshatch signal. 2. With the remote controller, set the aspect mode to regular (1). 3. Set for the PIP mode with the remote controller. 4. Shift the sub picture among the four corners.Confirm suitable display position.Adjust R605 (PIP POSITION) for the same left and right spacing (Fig.1). 5. Set for the POP mode. 6. Shift the POP sub picture among the four corners.Confirm suitable sub picture center position.Shift the sub picture right side either up or down and adjust R607 (R-POP POSITION) so hat picture center deviation is within 5 mm (Fig.2). 7. In the same manner, shift the sub picture left side either up or down and adjust R603 (L-POP POSITION) so that picture center deviation is within 5 mm.

●Micon PWB assembly (PU-7000A)

No.	Item	Test equipment	Test points	Adjustment locations	Adjustment procedure
1.	Sub-bright standard setting	Crosshatch Remote controller		S401(SERVICE SW) R801 (V HOLD) [inside front panel]	1. Receive a crosshatch signal. 2. With the remote controller, select Theater/AV Status (2) and set the aspect mode to full. 3. Set S401 to the service mode. 4. Turn R801 (V HOLD) to position the vertical blanking period at the center of the picture. 5. With the remote controller Function up/down keys, select B (bright). 6. Use the Function + and - keys and set to just before the vertical blanking period brightens (avoid setting too bright). 7. Return S401 to the normal mode.

No.	Item	Test equipment	Test points	Adjustment locations	Adjustment procedure
2.	Contrast level standard setting	Oscilloscope Split color bar Remote controller	TP-B [CRT SOCKET PWB Ass'y] 	S401(SERVICE SW)	1. Receive a split color bar signal. 2. With the remote controller, select Theater/AV Status (2) and set the aspect mode to full. 3. Set S401 to the service mode. 4. Connect oscilloscope to TP-B. 5. With the remote controller Function up/down keys, select P (picture). 6. Use the Function + and - keys to adjust the 100 % white waveform component for 100 Vp-p. 7. Return S401 to the normal mode.
3.	PIP, color, tint	Color bar Oscilloscope Remote controller	TP-B [CRT SOCKET PWB Ass'y]  1 2 3 4 1 +7V - 0 + 3-1 4-1 +3V	S401(SERVICE SW)	1. Receive a color bar signal. 2. With the remote controller, select Theater/AV Status (1) and set the aspect mode to full. 3. Set S401 to the service mode. 4. Connect oscilloscope to TP-B. 5. With the remote controller Function up/down keys, select T (Tint).Use the Function + and - keys to adjust for +3 V between 3 and 1. 6. With the remote controller Function up/down keys, select C (Color).Use the Function + and - keys to adjust for +7 V between 4 and 1. 7. Return S401 to the normal mode.

●Video PWB assembly (PU-1000A)

No.	Item	Test equipment	Test points	Adjustment locations	Adjustment procedure
1.	Side panel cutoff	Oscilloscope Crosshatch Remote controller	TP-R TP-G TP-B [CRT SOCKET PWB Ass'y]	R609(RGB BRIGHT) R606(RGB R CUT OFF) R608(RGB B CUT OFF)	1. Receive a color bar signal. 2. With the remote controller, select Theater/AV Status (2) and set the aspect mode to regular (4:3). 3. With the remote controller, select Menu 9 (Initial Set-up) Item 8 (Side Panel Luminance).Set the side panel luminance to Dark. 4. Connect oscilloscope to TP-G. 5. Adjust R609 (RGB BRIGHT) to set the side panel signal position 3 % higher than the pedestal. 6. Connect oscilloscope to TP-R. 7. Adjust R606 (RGB R CUTOFF) to set the side panel signal position 3 % higher than the pedestal. 8. Connect oscilloscope to TP-B. 9. Adjust R608 (RGB B CUTOFF) to set the side panel signal position 3 % higher than the pedestal. 10.Check for adjustment deviation at TP-G, TP-R and TP-B.If deviated, again perform adjustment. 11.Set the side panel luminance to Center.

PARTS LIST

CAUTION

- The parts marked ⚠ are very important for the safety. When replacing these parts, be sure to use specified ones to secure the safety.
- The module wiring board is supplied together with the assembly, but the parts which do not have the drawing in this Parts List, P. W. Board Ass'y and the Parts No. columns of which are filled with lines —— . will not be supplied.
- As a rule, the resistors and capacitors which are indicated as shown in (NOTE 2) "HOW TO EXPRESS PARTS NUMBERS OF STANDARD PARTS" are not shown in the list of the parts on the board.
  When ordering the service parts, confirm the resistance/rated power, capacitance/rated voltage, and type of the parts, then order by the part No. indicated according to (NOTE 2).

(NOTE 1) ABBREVIATIONS OF RESISTORS, CAPACITORS AND TOLERANCES

RESISTORS		CAPACITORS	
C R	Carbon Resistor	C CAP.	Ceramic Capacitor
F R	Fusible Resistor	E CAP.	Electrolytic Capacitor
P R	Plate Resistor	M CAP.	Mylar Capacitor
V R	Variable Resistor	HV CAP.	High Voltage Capacitor
HV R	High Voltage Resistor	MF CAP.	Metalized Film Capacitor
MF R	Metal Film Resistor	MM CAP.	Metalized Mylar Capacitor
MG R	Metal Glazed Resistor	MP CAP.	Metalized Polystyrol Capacitor
MP R	Metal Plate Resistor	PP CAP.	Polypropylene Capacitor
OM R	Metal Oxide Film Resistor	PS CAP.	Polystyrol Capacitor
CMF R	Coating Metal Film Resistor	TF CAP.	Thin Film Capacitor
UNF R	Non-Flammable Resistor	MPP CAP.	Metalized Polypropylene Capacitor
CH V R	Chip Variable Resistor	TAN. CAP.	Tantalum Capacitor
CH MG R	Chip Metal Glazed Resistor	CH C CAP.	Chip Ceramic Capacitor
COMP. R	Composition Resistor	BP E CAP.	Bi-Polar Electrolytic Capacitor
LPTC R	Linear Positive Temperature Coefficient Resistor	CH AL E CAP.	Chip Aluminum Electrolytic Capacitor
		CH AL BP CAP.	Chip Aluminum Bi-Polar Capacitor
		CH TAN. E CAP.	Chip Tantalum Electrolytic Capacitor
		CH AL BP E CAP.	Chip Tantalum Bi-Polar Electrolytic Capacitor

TOLERANCES									
F	G	J	K	M	N	R	H	Z	P
±1%	±2%	±5%	±10%	±20%	±30%	+30% - 10%	+50% - 10%	+80% - 20%	+100% - 0%

(NOTE 2) HOW TO EXPRESS PARTS NUMBERS OF STANDARD PARTS

■ RESISTOR

Q R □ □ □ □ □ — ○ ○ ○

Kind / Rated Power / Shape / Tolerance / Resistance

Symbol	Part Name
C	COMP.R
D	C R
S	CH MG R

Symbol	Rated Power
0 1	1 w
1 2	1/2 w
1 4	1/4 w
1 6	1/6 w
1 8	1/8 w

Symbol	Shape
1	Straight lead
8	Chip

Indicate with first two-figure expressed by Ω and following 0.
please note that,in case of resistance less than 10 Ω, a letter "R"will be effective as point.

EX.

2.2 Ω = 2R2
470 Ω = 47×10¹ → 471
150kΩ = 15×10⁴ → 154

■ CAPACITOR

Q □ □ □ □ □ □ — ○ ○ ○

Kind / Shape / Rated Voltage / Tolerance / Capacitance

Symbol	Part Name
CS	C CAP.
CS	CH C CAP.
ET	E CAP.
FM	M CAP.

5Figure / 6Figure	0	1	2
A		10V	100V
C		16V	160V
D			200V
E		25V	250V
H		50V	500V
J	6.3V	63V	
V		35V	

Indicate with first two-figure expressed by pF and following 0.
Please note that,in case of capacitance less than 10 pF a letter "R" will be effective as point.

EX

5pF = 5R0
1000pF = 10×10² → 102
47μF = 47×10⁶ → 476

Symbol	Shape
1	Straight lead
1	Leads in the same direction
8	Chip
A	Leads in the same direction (compact part)

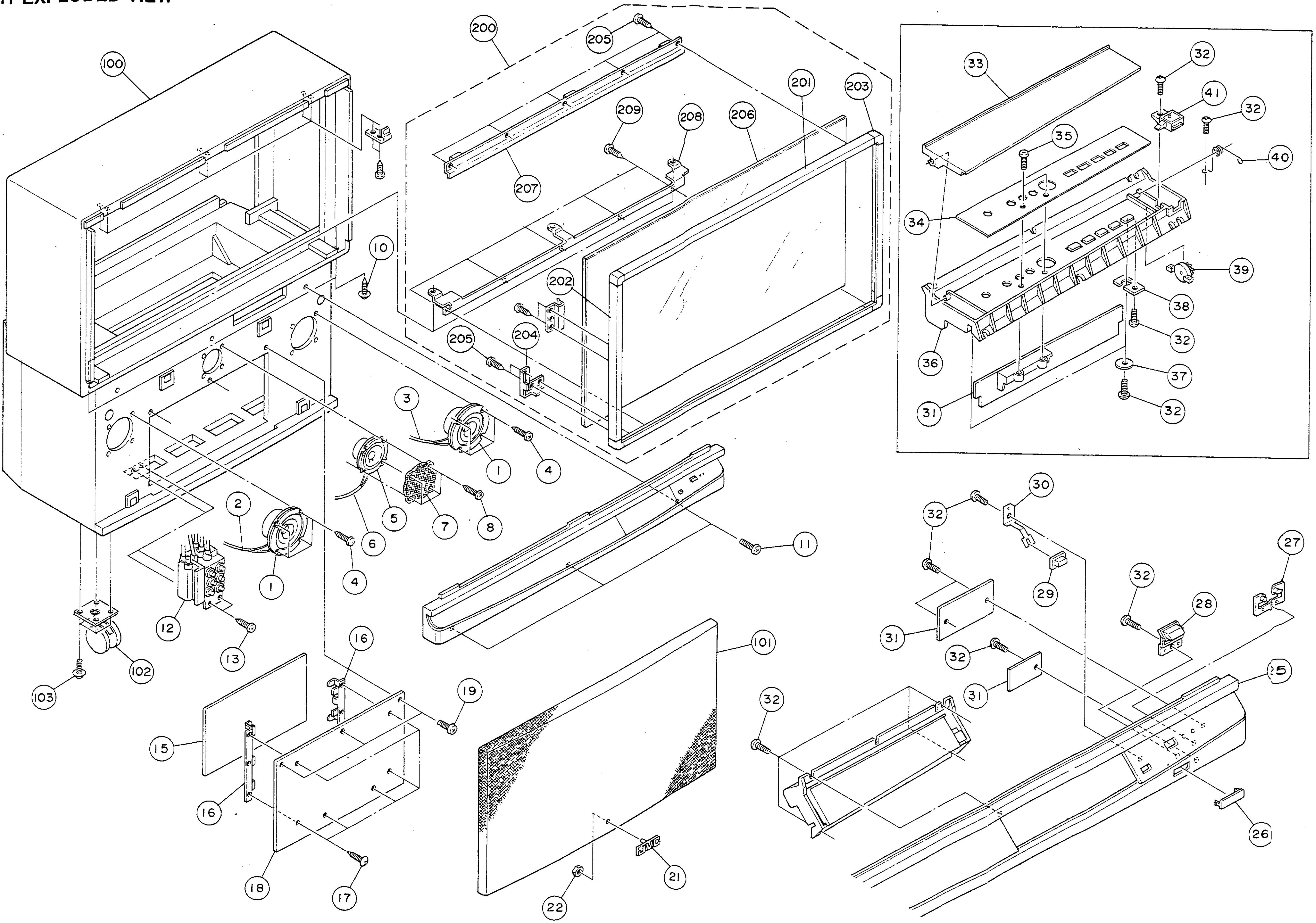
M1 EXPLODED VIEW PARTS LIST

⚠	Ref.No.	Part No.	Part Name	Description	Local
	1	FF166-95-KD	SPEAKER	×2	
	2	CHGS0015-AE-G	SP WIRE ASSY		
	3	CHGS0015-AD-G	SP WIRE ASSY		
	4	SDSA4015Z	BIND HEAD SCREW	×8	*
	5	FF120-96-KD	SPEAKER		
	6	CHGS0015-0B-G	SP WIRE ASSY		
	7	CM35746-001-A	SP BARRIER		*
	8	GBSA4020M	W TAP SCREW	×4	*
	10	GBSA4016M	TAPPING SCREW	×2	*
	11	SDSP4016M	SCREW	×3	*
⚠	12	CJ39911-00A-28	FOCUS PACK ASSY		
	13	SDSA3012Z	TAPPING SCREW	×2	*
⚠	15	------------	CONVER PWB ASSY	PU-8000A-H1	
	16	------------	CONVER FRAME	×3,CM35709-001-A	*
	17	GBSA4016M	TAPPING SCREW	×6	*
	18	CN30252-A01-A	FRONT BOARD		*
	19	SDSP4016M	SCREW	×3	*
	21	CM47752-001	BRAND MARK		
	22	NNS3000Z	NUT		*
⚠	25	CM12389-A01-VA	CONTROL PANEL		*
	26	CM35674-001	RM WINDOW		
	27	CM35666-A01-H	LED LENS		*
	28	CM35667-001-A	PW KNOB		*
	29	CM46014-A01	KNOB		
	30	CM47717-001-A	KNOB SPRING		*
⚠	31	------------	VIDEO PWB ASSY	PU-1000A-H1	
	32	SBSB4012Z	TAPPING SCREW	×14	*
⚠	33	CM22625-A01-VA	DOOR		*
⚠	34	CM35708-001-H	CONTROL SHEET		*
	35	SDSB3010M	TAPPING SCREW	×2	*
⚠	36	CM12391-B01-VA	CONTROL BASE		*
	37	Q03091-115	WASHER	×2	
	38	CM47727-001-A	DAMMPER HOLDER		*
	39	CM46031-00C	DAMPER		
	40	CM47716-001	DOOR SPRING		
	41	CM33984-00A	LOCK UNIT		
	100	CN10342-A0A-A	WOOD CABINET	Include No.101～209	*
	101	CN20338-A0A-A	SP GRILLE		*
	102	CM35707-00A-A	CASTER	×4	*
	103	SDSA4030Z	SCREW	×16	*
	200	55BX4-SC-SJA	SCREEN ASSY	Include No.201～209	*
	201	CM35704-001	SC PANEL TB →上下	×2	
	202	CM35704-002	SC PANEL RL →左右	×2	
	203	CM35705-001	CORNER BLOCK	×4	
	204	CM35706-001	CORNER BKT	×4	
	205	SDSA4015Z	BIND HEAD SCREW	×16	
⚠	206	CM35802-00A	SCREEN ASSY		
	207	CM12404-00A-H	S CLAMPER T		
	208	CM12405-00A-H	S CLAMPER B		
	209	SDSA4015Z	BIND HEAD SCREW	×10	

M2 EXPLODED VIEW PARTS LIST

⚠	Ref.No.	Part No.	Part Name	Description	Local
⚠	1	------------	POWER PWB ASSY	PU-9000A-H1	
	2	GBSA4016M	TAPPING SCREW		*
⚠	3	CJ39914-00A	HV DIVIDER		
	4	GBSB3008Z	TAPPING SCREW	×2	*
	5	CM47113-001	HVD SUPPORT		
	6	SDSA4015Z	BIND HEAD SCREW	×2	*
⚠	7	CM43198-003	UL CAUTION		
⚠	10	------------	SURROUND PWB ASSY	HZ-6201A	
⚠	11	------------	AUDIO PWB ASSY	PU-6000A-H1	
⚠	12	------------	RECEIVER PWB ASSY	PU-1100A-H1	
⚠	13	SGZ-F005A	SIF MODULE PWB A	SSY	
⚠	14	SGY6001A(H1)	MTS PWB ASSY		
⚠	15	SGZ-F007A	PIF MODULE PWB A	SSY	
⚠	16	------------	S INPUT PWB ASSY	PU-1200A-H1	
⚠	17	------------	LOGICAL COMB PWB	ASSY,HZ-4201A	
⚠	18	------------	ASPECT CONV. PWB	ASSY,EZ-1D002A	
⚠	19	PU-D001A-H1	D FOCUS MODULE A	SSY	
⚠	20	------------	MICON PWB ASSY	PU-7000A-H1	
⚠	21	------------	VIDEO PWB ASSY	PU-1000A-H1	
⚠	22	------------	DEF PWB ASSY	PU-2000A-H1	
⚠	23	CJ27885-00B	FBT	T2602	
⚠	24	CEEK254-A02-M	TUNER		*
	25	------------	PB HOLDER	×3,CM47746-001-V0	
	26	------------	PB HOLDER BASE	CM22642-B01	*
	27	SBSB4012Z	TAPPING SCREW	×3	
	28	CM12402-A01-V0	MAIN BASE		
	29	SDSP4016M	SCREW	×2	*
	30	------------	PIP HOLDER	CM35694-001	
	31	SBSB4012Z	TAPPING SCREW		
	32	CM35828-A01	D.F.INSULATOR		
	34	SBSB4012Z	TAPPING SCREW	×2	*
	35	CEX40725	2 RF SW		*
⚠	36	CM12403-B01-V0	AV BOARD		
⚠	37	CM22643-A01-H	TERMINAL SHEET		*
	38	SDSB3010M	TAPPING SCREW	×6	*
	39	------------	X-RAY SHIELD	×2,CM35880-001	
	40	------------	UNIT BEAM 1	×2,CM35699-001-A	*
	41	------------	HANGER	CM35701-001-A	*
	42	------------	HANGER	CM35701-002-A	*
	43	------------	SHADING BKT	CM35702-001-A	*
	44	CM35838-001-A	WARNING LABEL		*
	45	DPSP5020M	ASSY SCREW	×6	
	46	CM35744-00A-A	LENS ASSY	×3	*
	47	CM47771-001-A	TAP SCREW	×12	*
⚠	48	CM35743-00A-A	R COUPLER ASSY		*
⚠	49	CM35743-00B-A	G COUPLER ASSY		*
⚠	50	CM35743-00C-A	B COUPLER ASSY		*
⚠	51	A75034-B	P.C.MAGNET	×3	
⚠	52	CE20251-00A	DEF YOKE	×3	*
	53	GBSB4016Z	TAPPING SCREW	×12	*
⚠	55	------------	CRT SOCKET PWB A	SSY,PU-3000A-H1	
	60	CM35703-001-H	MIRROR HOLDER		*
	61	SBSB4012Z	TAPPING SCREW	×3	*
	62	CM35696-001-A	MIRROR		*
	63	CM12401-B01-A	REAR COVER		*
	64	GBSA4016M	TAPPING SCREW	×11	*
	65	CN20339-001-A	BACK BOARD		*
	66	GBSA4016M	TAPPING SCREW	×10	*
	67	CM30456-003-A	WIRE CLAMP		*
	68	SDSA3012Z	TAPPING SCREW		*
⚠	69	QMP14E0-250R	POWER CORD		
	70	CM44889-004-A	RATING LABEL		*

M1 EXPLODED VIEW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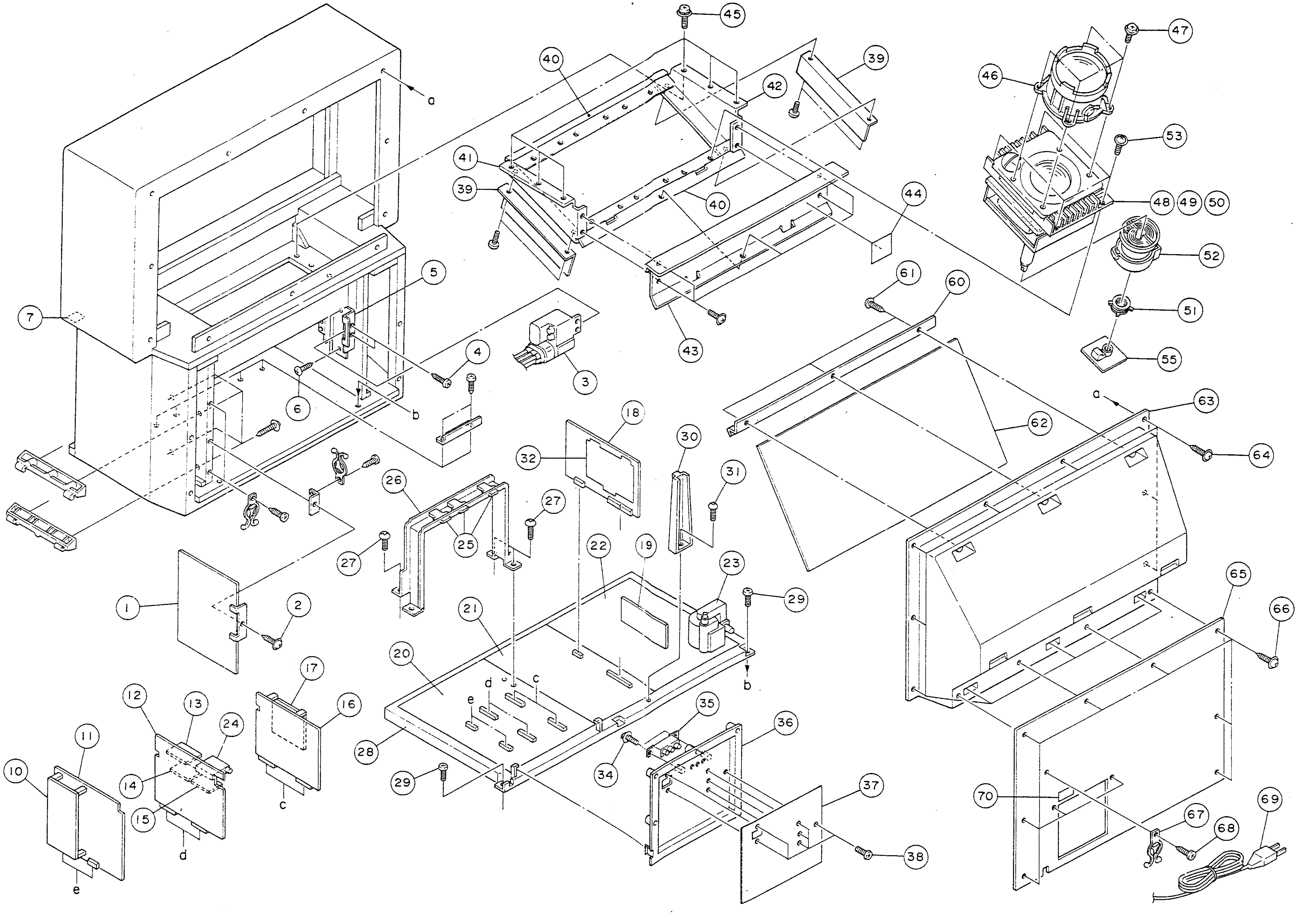
M2 EXPLODED VIEW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PRINTED WIRING BOARD PARTS LIST

1. VIDEO PWB ASS'Y (PU-1000A-H1)

⚠ Symbol No.	Part No.	Part Name	Description	Local
VARIABLE RESISTOR				
R1240	QVPE611-502HZ	V R	5kΩ B PIP R DRIVE	
R1248	QVPE611-502HZ	V R	5kΩ B PIP B DRIVE	
R1253	QVPE611-203HZ	V R	20kΩ B PIP CONTRAST	
R1274	QVPE611-502HZ	V R	5kΩ B PIP BRIGHT	
R1277	QVPE611-502HZ	V R	5kΩ B PIP R CUTOFF	
R1280	QVPE611-502HZ	V R	5kΩ B PIP B CUTOFF	
R1407	QVPE611-103HZ	V R	10kΩ B 135° DEF	
R1419	QVPE611-103HZ	V R	10kΩ B G-Y CORRECT	
R1537	QVPE611-103HZ	V R	10kΩ B BLACK LEVEL	
R1606	QVPE611-103HZ	V R	10kΩ B RGB R CUTOFF	
R1608	QVPE611-103HZ	V R	10kΩ B RGB B CUTOFF	
R1609	QVPE611-103HZ	V R	10kΩ B RGB BRIGHT	
R1801	QVAA038-CB53A	V R	50kΩ B V.HOLD	
RESISTOR				
⚠ R1319	QRD149J-180S	C R	18 Ω 1/4W J	
CAPACITOR				
C1203-05	QEN61CM-226Z	BP E CAP.	22μF 16V M	
C1208	QFLC1HK-103MZ	M CAP.	0.01μF 50V K	
C1223	QEN61CM-106Z	BP E CAP.	10μF 16V M	
C1226	QEN61CM-106Z	BP E CAP.	10μF 16V M	
C1227	QFV71HJ-104MZ	TF CAP.	0.1μF 50V J	
C1229	QFV71HJ-104MZ	TF CAP.	0.1μF 50V J	
C1313	QFLC1HK-103MZ	M CAP.	0.01μF 50V K	
C1314	QFV71HJ-104MZ	TF CAP.	0.1μF 50V J	
C1503	QFLC1HK-183MZ	M CAP.	0.018μF 50V K	
C1506	QFLC1HK-103MZ	M CAP.	0.01μF 50V K	
C1511	QEN61CM-106Z	BP E CAP.	10μF 16V M	
C1512	QFV71HJ-393MZ	TF CAP.	0.039μF 50V J	
C1513	QFV71HJ-333MZ	TF CAP.	0.033μF 50V J	
C1521	QEN61HM-335Z	BP E CAP.	3.3μF 50V M	
⚠ C1901	QETC1EM-227Z	E CAP.	220μF 25V M	
⚠ C1903	QETC1EM-227Z	E CAP.	220μF 25V M	
COIL				
L1501	CELP026-150Z	PEAKING COIL	15μH	
L1502	CELP002-182Z	PEAKING COIL	1.8mH	
DIODE				
D1301	1SS133-T2	SI.DIODE		
D1402	1SS133-T2	SI.DIODE		
D1501-12	1SS133-T2	SI.DIODE		
D1603-05	1SS133-T2	SI.DIODE		
D1607-27	1SS133-T2	SI.DIODE		
D1801	GL5RG5	L.E.D.	POWER	
D1802	SEL1710Y	L.E.D.	ON TIMER	
D1811-14	1SS133-T2	SI.DIODE		
TRANSISTOR				
Q1101-02	2SC3311A(QR)-T	SI.TRANSISTOR		
Q1201-06	2SC3311A(QR)-T	SI.TRANSISTOR		
Q1209-15	2SC3311A(QR)-T	SI.TRANSISTOR		
Q1220-22	2SC3311A(QR)-T	SI.TRANSISTOR		
Q1223	2SA1309A(QR)-T	SI.TRANSISTOR		
Q1304-10	2SC3311A(QR)-T	SI.TRANSISTOR		
Q1311	2SA1309A(QR)-T	SI.TRANSISTOR		
Q1312	2SC3311A(QR)-T	SI.TRANSISTOR		
Q1401	2SC3311A(QR)-T	SI.TRANSISTOR		
Q1402-03	2SA1309A(QR)-T	SI.TRANSISTOR		
Q1404	2SC3311A(QR)-T	SI.TRANSISTOR		
Q1405	2SA1309A(QR)-T	SI.TRANSISTOR		
Q1406-07	2SC3311A(QR)-T	SI.TRANSISTOR		
Q1408-10	2SA1309A(QR)-T	SI.TRANSISTOR		
Q1411-12	2SC3311A(QR)-T	SI.TRANSISTOR		
Q1501-05	2SC3311A(QR)-T	SI.TRANSISTOR		
Q1506	2SA1309A(QR)-T	SI.TRANSISTOR		

PU-1000A-H1

⚠ Symbol No.	Part No.	Part Name	Description	Local
TRANSISTOR				
Q1507-09	2SC3311A(QR)-T	SI.TRANSISTOR		
Q1510	2SA1309A(QR)-T	SI.TRANSISTOR		
Q1511-12	2SC3311A(QR)-T	SI.TRANSISTOR		
Q1513	2SA1309A(QR)-T	SI.TRANSISTOR		
Q1601	2SC3311A(QR)-T	SI.TRANSISTOR		
Q1602-05	2SA1309A(QR)-T	SI.TRANSISTOR		
Q1606-13	2SC3311A(QR)-T	SI.TRANSISTOR		
Q1801	2SA1309A(QR)-T	SI.TRANSISTOR		
IC				
IC1201	AN5867K-A	I.C.		
IC1302	M51494L	I.C.(MONO-ANA)		
IC1401	JCC1001	I.C.		
IC1501	JCC1004	I.C.(MONO-ANA)		
IC1601	AN5352N	I.C.		
IC1801	SPS-420-1	IFR DETECT UNIT		
⚠ IC1901	UPC2412HF	I.C.(MONO-ANA)		
⚠ IC1902	AN7809F	I.C.		
OTHERS				
	CM44462-C01	LED SHADE		
DL1301	CE40986-A01	DELAY LINE		
DL1401-02	CE40986-A01	DELAY LINE		
J18J3	CEMZ002-002	PIN JACK	INPUT 4	
S1501	QSL4A13-C03Z	LEVER SWITCH	P.MUTE SW	
S1801	QSP4H11-C08	PUSH SWITCH	FUNCTION	
S1802	QSP4H11-C08	PUSH SWITCH	LEVEL+	
S1803	QSP4H11-C08	PUSH SWITCH	LEVEL-	
S1804	QSP4H11-C08	PUSH SWITCH	VOL+	
S1805	QSP4H11-C08	PUSH SWITCH	VOL-	
S1806	QSP4H11-C04Z	PUSH SWITCH	POWER	

2. RECEIVER PWB ASS'Y (PU-1100A-H1)

⚠	Symbol No.	Part No.	Part Name	Description	Local
	VARIABLE RESISTOR				
	R1103	QVPC626-203H	TRIM R	20kΩ B NOISE	
	R1601	QVPC623-103HZ	TRIM R	10kΩ B SEPARATION	
	RESISTOR				
⚠	R1001	QRD149J-5R6S	C R	5.6 Ω 1/4W J	
	R1107	QRV141F-1001AY	MF R	1kΩ 1/4W F	
	R1109	QRV141F-8200AY	MF R	820 Ω 1/4W F	
⚠	R1111	QRD149J-4R7S	C R	4.7 Ω 1/4W J	
⚠	R1511	QRD149J-100S	C R	10 Ω 1/4W J	
⚠	R1602	QRD149J-560S	C R	56 Ω 1/4W J	
⚠	R1629	QRD149J-101S	C R	100 Ω 1/4W J	
⚠	R1652	QRD149J-101S	C R	100 Ω 1/4W J	
	DIODE				
	D1001	MA4330(M)-T2	ZENER DIODE		
	D1002	1SS133-T2	SI.DIODE		
	D1101	MA4200(M)-T2	ZENER DIODE		
	D1301-04	MA4150(M)-T2	ZENER DIODE		
	D1401-04	MA4150(M)-T2	ZENER DIODE		
	D1501	MA4150(M)-T2	ZENER DIODE		
	D1601	MA4091(H)-T2	ZENER DIODE		
	D1701-10	1SS133-T2	SI.DIODE		
	TRANSISTOR				
	Q1001	2SA1309A(QR)-T	SI.TRANSISTOR		
	Q1002	2SC3311A(QR)-T	SI.TRANSISTOR		
	Q1101	2SC3311A(QR)-T	SI.TRANSISTOR		
	Q1501	2SC3311A(QR)-T	SI.TRANSISTOR		
	Q1502	2SC1815(YG)-T	SI.TRANSISTOR		
	Q1611-14	DTC323TS-T	DIGI.TRANSISTOR		
	Q1701	2SC3311A(QR)-T	SI.TRANSISTOR		
	Q1702-03	2SA1309A(QR)-T	SI.TRANSISTOR		
	Q1704	2SC3311A(QR)-T	SI.TRANSISTOR		
	Q1705-06	2SA1309A(QR)-T	SI.TRANSISTOR		
	IC				
	IC1001	TA78L005AP-Y	I.C.(H)		
	IC1301	IR3P76	I.C.(MONO-ANA)		
	IC1401	IR3P76	I.C.(MONO-ANA)		
	IC1501	LA7016	I.C.		
	IC1611	XRA15218N	I.C.(MONO-ANA)		
	IC1612	MC14052BCP	I.C.(DIGI-MOS)		
	IC1613	XRA15218N	I.C.(MONO-ANA)		
	OTHERS				
⚠		SGZ-F007A	PIF MODULE PWB ASSY		
⚠		SGZ-F005A	SIF MODULE PWB ASSY		
⚠		SGY6001A(H1)	MTS PWB ASSY		
	J1001	CEMN029-001	PIN JACK	AUDIO OUT	
	J1002	AX49607-023	MINI JACK	PIP/MAIN/SURROUND AUDIO	
	J1003	CEMN052-001	PIN JACK	LINE OUT/INPUT1,2,3	

3. S INPUT PWB ASS'Y (PU-1200A-H1)

⚠ Symbol No.	Part No.	Part Name	Description	Local
VARIABLE RESISTOR				
R1411	QVPE611-103HZ	V R	10kΩ B SUB COLOR	
R1414	QVPE611-103HZ	V R	10kΩ B SUB TINT	
CAPACITOR				
C1001-02	QFLC1HJ-103MZ	M CAP.	0.01μF 50V J	
C1005	QFLC1HJ-103MZ	M CAP.	0.01μF 50V J	
C1007	QFLC1HJ-103MZ	M CAP.	0.01μF 50V J	
C1009	QFLC1HJ-103MZ	M CAP.	0.01μF 50V J	
C1104-06	QFLC1HJ-563MZ	M CAP.	0.056μF 50V J	
C1107	QEN61CM-336Z	BP E CAP.	33μF 16V M	
C1204-06	QFLC1HJ-563MZ	M CAP.	0.056μF 50V J	
C1207	QEN61CM-336Z	BP E CAP.	33μF 16V M	
C1402	QEKC1HM-105GMZ	E CAP.	1μF 50V M	
C1403	QEKC1HM-224GMZ	E CAP.	0.22μF 50V M	
C1405	QFLC1HJ-473MZ	M CAP.	0.047μF 50V J	
C1407	QEKC1HM-105GMZ	E CAP.	1μF 50V M	
C1425	QEKC1HM-475GMZ	E CAP.	4.7μF 50V M	
C1426	QFLC1HJ-473MZ	M CAP.	0.047μF 50V J	
C1428	QAT3110-300AZ	TRIM CAP.	30pF COLOR SYNC	
C1501	QEKC1HM-474GMZ	E CAP.	0.47μF 50V M	
C1605	QEKC1CM-106GMZ	E CAP.	10μF 16V M	
C1610	QFV71HJ-104MZ	TF CAP.	0.1μF 50V J	
C1611	QEKC1CM-107MZ	E CAP.	100μF 16V M	
C1701	QEKC1HM-105GMZ	E CAP.	1μF 50V M	
C1702	QEKC1CM-336MZ	E CAP.	33μF 16V M	
C1703	QFLC1HJ-472MZ	M CAP.	4700pF 50V J	
C1706	QFV71HJ-124MZ	TF CAP.	0.12μF 50V J	
C1707	QEKC1HM-105GMZ	E CAP.	1μF 50V M	
C1708	QFV71HJ-224MZ	TF CAP.	0.22μF 50V J	
C1709	QEKC1CM-336MZ	E CAP.	33μF 16V M	
TRANSFORMER				
T1601	CE42008-002	BANDPASS FILTER		
COIL				
L1401	CELP026-331Z	PEAKING COIL	330μH	
L1402	CELP026-820Z	PEAKING COIL	82μH	
L1403	CELP026-470Z	PEAKING COIL	47μH	
L1404	CELP026-820Z	PEAKING COIL	82μH	
L1405	CELP026-470Z	PEAKING COIL	47μH	
L1406	CELP002-562Z	PEAKING COIL	5.6mH	
L1601-02	CELP026-180Z	PEAKING COIL	18μH	
DIODE				
D1001-03	MA4075(M)-T2	ZENER DIODE		
D1101-06	MA4150(M)-T2	ZENER DIODE		
D1201-06	MA4150(M)-T2	ZENER DIODE		
D1401-03	1SS133-T2	SI.DIODE		
D1501-10	1SS133-T2	SI.DIODE		
D1511	MA4051(M)-T2	ZENER DIODE		
D1701	1SS133-T2	SI.DIODE		
TRANSISTOR				
Q1001-03	2SC3311A(QR)-T	SI.TRANSISTOR		
Q1101	2SC3311A(QR)-T	SI.TRANSISTOR		
Q1201-02	2SC3311A(QR)-T	SI.TRANSISTOR		
Q1203	2SA1309A(QR)-T	SI.TRANSISTOR		
Q1301-02	2SA1309A(QR)-T	SI.TRANSISTOR		
Q1303-05	2SC3311A(QR)-T	SI.TRANSISTOR		
Q1401	2SC3311A(QR)-T	SI.TRANSISTOR		
Q1402	2SA1309A(QR)-T	SI.TRANSISTOR		
Q1403-09	2SC3311A(QR)-T	SI.TRANSISTOR		
Q1501-04	2SC3311A(QR)-T	SI.TRANSISTOR		
Q1601-08	2SC3311A(QR)-T	SI.TRANSISTOR		
Q1701	2SA1309A(QR)-T	SI.TRANSISTOR		

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⚠ Symbol No.	Part No.	Part Name	Description	Local
I C				
IC1101	IR3P60B	I.C.(MONO-ANA)		
IC1102	AN7809F	I.C.		
IC1201	IR3P60B	I.C.(MONO-ANA)		
IC1401	AN5322NK	I.C.		
IC1601	MC14066BCP	I.C.		
IC1701	LA7210	I.C.(MONO-ANA)		
OTHERS				
CF1701	CSB503F18	CER.RESONATOR		
DL1301	CE42151-001	DELAY LINE		
DL1601	CE41577-002	DELAY LINE		
J1001	QMD2B04-001	MINI CONNECTOR	S VIDEO INPUT1	
J1002	QMD2B04-001	MINI CONNECTOR	S VIDEO INPUT2	
J1003	CEX40288-001	EARPHONE JACK	AV COMPU. Ⅰ RECEIVER/AMP	
J1004	CEX40288-001	EARPHONE JACK	AV COMPU. Ⅱ VCR ONLY	
S1401	QSL4A13-C03Z	LEVER SWITCH	COLOR SYNC SW1	
S1402	QSL4A13-C03Z	LEVER SWITCH	COLOR SYNC SW2	
X1401	CE40668-001	CRYSTAL		

4. DEF PWB ASS'Y (PU-2000A-H1)

⚠	Symbol No.	Part No.	Part Name	Description	Local
	VARIABLE RESISTOR				
	R2412	QVPC611-103HZ	V R	10kΩ B V.BLK	
	R2441	QVPC611-202HZ	V R	2kΩ B V.BLK POSI	
	R2462	QVPC611-104HZ	V R	100kΩ B CINEMA V.SIZE	
	R2465	QVPC611-203HZ	V R	20kΩ B PANORAMA V.SIZE	
	R2469	QVPC611-103HZ	V R	10kΩ B REG/FULL V.SIZE	
	R2511	QVPC611-502HZ	V R	5kΩ B H.FREQ	
	RESISTOR				
⚠	R2318	QRD149J-153S	C R	15kΩ 1/4W J	
⚠	R2413	QRD149J-390S	C R	39 Ω 1/4W J	
⚠	R2500	QRD121J-104SY	C R	100kΩ 1/2W J	
	R2516	QRG039J-562	OM R	5.6kΩ 3W J	
	R2517	QRG039J-332	OM R	3.3kΩ 3W J	
	R2527-28	QRG039J-682	OM R	6.8kΩ 3W J	
	R2530	QRG039J-100	OM R	10 Ω 3W J	
	R2563	QRG039J-682	OM R	6.8kΩ 3W J	
	R2564	QRG039J-822	OM R	8.2kΩ 3W J	
⚠	R2579	QRZ0103-016	NETW.R	10kΩ	
⚠	R2580	QRV141F-1401AY	MF R	1.4kΩ 1/4W F	
⚠	R2583	QRV141F-1401AY	MF R	1.4kΩ 1/4W F	
	R2589	QRD149J-1R0S	C R	1 Ω 1/4W J	
	R2591	QRG019J-153S	OM R	15kΩ 1W J	
	R2592	QRG019J-273S	OM R	27kΩ 1W J	
	R2594	QRG019J-273S	OM R	27kΩ 1W J	
⚠	R2598	QRD129J-1R0S	C R	1 Ω 1/2W J	
⚠	R2600	QRD129J-1R0S	C R	1 Ω 1/2W J	
⚠	R2604	QRZ0103-016	NETW.R	10kΩ	
	R2702	QRV141F-5621AY	MF R	5.62kΩ 1/4W F	
⚠	R2708	QRD129J-561S	C R	560 Ω 1/2W J	
⚠	R2709	QRZ0104-1R0	C R	1 Ω 1/2W J	
⚠	R2710	QRZ0104-1R0	C R	1 Ω 1/2W J	
⚠	R2711	QRZ0104-1R0	C R	1 Ω 1/2W J	
	R2712	QRG019J-271S	OM R	270 Ω 1W J	
⚠	R2713	QRD149J-1R0S	C R	1 Ω 1/4W J	
⚠	R2714	QRZ0104-1R0	C R	1 Ω 1/2W J	
	R2718	QRG019J-221S	OM R	220 Ω 1W J	
	R2722	QRG019J-100S	OM R	10 Ω 1W J	
⚠	R2723	QRZ0104-1R0	C R	1 Ω 1/2W J	
	CAPACITOR				
⚠	C2102	QETB1EM-477	E CAP.	470μF 25V M	
	C2301	QEN61HM-474Z	BP E CAP.	0.47μF 50V M	
	C2305	QFLC1HJ-333MZ	M CAP.	0.033μF 50V J	
	C2402	QFV71HJ-394MZ	TF CAP.	0.39μF 50V J	
	C2404	QFV71HJ-394MZ	TF CAP.	0.39μF 50V J	
	C2407	QEN61HM-475Z	BP E CAP.	4.7μF 50V M	
	C2410	QFLC1HJ-473MZ	M CAP.	0.047μF 50V J	
	C2411	QFV71HJ-473MZ	TF CAP.	0.047μF 50V J	
	C2412	QEE61CK-225BZ	TAN.CAP.	2.2μF 16V K	
	C2413	QFV71HJ-333MZ	TF CAP.	0.033μF 50V J	
	C2415	QFLC1HJ-473MZ	M CAP.	0.047μF 50V J	
	C2416	QFLC1HJ-103MZ	M CAP.	0.01μF 50V J	
⚠	C2417	QEE61VK-105BZ	TAN.CAP.	1μF 35V K	
⚠	C2418	QETC1VM-477Z	E CAP.	470μF 35V M	
⚠	C2420	QETC1VM-107Z	E CAP.	100μF 35V M	
	C2426	QFV71HJ-104MZ	TF CAP.	0.1μF 50V J	
	C2428	QFV71HJ-124MZ	TF CAP.	0.12μF 50V J	
	C2429	QFLC1HJ-103MZ	M CAP.	0.01μF 50V J	
	C2431	QFLC1HJ-103MZ	M CAP.	0.01μF 50V J	
	C2502	QFLC1HJ-223MZ	M CAP.	0.022μF 50V J	
	C2503	QFLC1HJ-103MZ	M CAP.	0.01μF 50V J	
	C2504	QFV71HJ-105MZ	TF CAP.	1μF 50V J	
	C2505	QFLC1HJ-683MZ	M CAP.	0.068μF 50V J	
	C2506	QFLC1HJ-822MZ	M CAP.	8200pF 50V J	
	C2508	QFV71HJ-104MZ	TF CAP.	0.1μF 50V J	

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⚠	Symbol No.	Part No.	Part Name	Description	Local
	CAPACITOR				
	C2509	QFLC1HJ-273MZ	M CAP.	0.027 μF 50V J	
	C2511	QFP31HJ-562SZ	PP CAP.	5600 pF 50V J	
⚠	C2515	QFZ0117-6001S	M P P CAP.	6000 pF 1.6kV	
⚠	C2516	QFZ0117-5501S	M P P CAP.	5500 pF 1.6kV	
⚠	C2517	QFP32GJ-223M	PP CAP.	0.022 μF 400V J	
	C2518-19	QEM61HK-475MZ	E CAP.	4.7 μF 50V K	
⚠	C2520	QFZ0082-501S	M P P CAP.	500 pF 1600V J	
⚠	C2521	QFZ0119-104S	M P P CAP.	0.1 μF 100V	
	C2522	QFV71HJ-104MZ	TF CAP.	0.1 μF 50V J	
	C2523	QFZ0119-304S	M P P CAP.	0.3 μF 200V	
	C2524	QFZ0119-354S	M P P CAP.	0.35 μF 200V	
	C2527-28	QFLC1HJ-683MZ	M CAP.	0.068 μF 50V J	
	C2529	QFLC1HJ-682MZ	M CAP.	6800 pF 50V J	
⚠	C2531	QETC1VM-476Z	E CAP.	47 μF 35V M	
	C2533	QEN61HM-335Z	BP E CAP.	3.3 μF 50V M	
⚠	C2536	QFZ0081-5301S	M P P CAP.	5300 pF 1600V ±3%	
⚠	C2537	QFZ0081-5501S	M P P CAP.	5500 pF 1600V ±3%	
⚠	C2539	QFZ0119-564S	M P P CAP.	0.56 μF 200V	
⚠	C2540	QEZ0097-106R	E CAP.	10 μF 160V M	
	C2542	QFLC1HJ-562MZ	M CAP.	5600 pF 50V J	
⚠	C2543	QETC1HM-476Z	E CAP.	47 μF 50V M	
	C2546	QEN61HM-476Z	BP E CAP.	47 μF 50V M	
⚠	C2548	QETC1HM-476Z	E CAP.	47 μF 50V M	
⚠	C2550	QETB2CM-227	E CAP.	220 μF 160V M	
⚠	C2552	QETC0JM-107Z	E CAP.	100 μF 6.3V M	
⚠	C2556	QETB2EM-336	E CAP.	33 μF 250V M	
⚠	C2558	QETB1VM-228	E CAP.	2200 μF 35V M	
⚠	C2560	QETB2CM-107	E CAP.	100 μF 160V M	
⚠	C2561	QFZ0081-1002S	M P P CAP.	1000 pF 1600V ±3%	
⚠	C2563	QETC1EM-227Z	E CAP.	220 μF 25V M	
⚠	C2564	QEZ0150-127R	E CAP.	120 μF 250V	
	C2566-67	QEN61HM-105Z	BP E CAP.	1 μF 50V M	
⚠	C2568	QETC1HM-476Z	E CAP.	47 μF 50V M	
	C2569	QFLC1HJ-103MZ	M CAP.	0.01 μF 50V J	
	C2570	QFZ0119-105S	M P P CAP.	1 μF 200V M	
⚠	C2571	QFZ0119-804S	M P P CAP.	0.8 μF 200V M	
	C2703	QFV71HJ-684MZ	TF CAP.	0.68 μF 50V J	
	TRANSFORMER				
	T2501	CE42034-001	H.DRIVE TRANSF.		
⚠	T2502	CE42352-00A	H.O.T		
	T2601	CE42034-001	H.DRIVE TRANSF.		
⚠	T2603	CJ39903-00A	DUMMY YOKE		
	COIL				
⚠	L2501	CJ30030-019	HEATER CHOKE		
⚠	L2502	CELL001-003	LINIARITY COIL		
	L2503	CELC009-001	WIDTH COIL		
	DIODE				
	D2301-06	1SS133-T2	SI.DIODE		
	D2307	RG2A	SI.DIODE		
	D2401-02	1SS133-T2	SI.DIODE		
	D2403	RD11ES(B3)-T2	ZENER DIODE		
⚠	D2404	1SR35-100A-T2	SI.DIODE		
	D2406	HZ9B1L-T2	ZENER DIODE		
	D2410	RD3.0ES(B2)-T2	ZENER DIODE		
	D2501	RD11ES(B3)-T2	ZENER DIODE		
	D2502-03	RD12E(B3)-T2	ZENER DIODE		
⚠	D2504	ERD08M-15	SI.DIODE		
⚠	D2505	RU4AM-C1	SI.DIODE		
	D2507-08	1SS82-T2	SI.DIODE		
	D2509	HZ5B3-T2	ZENER DIODE		
	D2511	1SS133-T2	SI.DIODE		
⚠	D2512	ERD07-15-L	SI.DIODE		
	D2516	EU2A-LFF4	SI.DIODE		

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⚠	Symbol No.	Part No.	Part Name	Description	Local
	DIODE				
⚠	D2517	1SS82-T2	SI.DIODE		
	D2518	MA4180(M)-T2	ZENER DIODE		
	D2519	1SS133-T2	SI.DIODE		
	D2520	HZ18-2L-T2	ZENER DIODE		
	D2521-23	1SS133-T2	SI.DIODE		
⚠	D2524	HZ5C1(C1)-T2	ZENER DIODE		
	D2525	1SS133-T2	SI.DIODE		
	D2526	RD33E(B1)-T2	ZENER DIODE		
⚠	D2527	HZ5C1(C1)-T2	ZENER DIODE		
	D2528	HZ6A1L-T2	ZENER DIODE		
	D2529	RD30ES(B2)-T2	ZENER DIODE		
⚠	D2530	ES1F-LFG2	SI.DIODE		
⚠	D2531	RH1S-LFA1	SI.DIODE		
⚠	D2532	RU3AM-LFB1	SI.DIODE		
⚠	D2533	RU3AM-LFB1	SI.DIODE		
⚠	D2534	EU2A-T3	SI.DIODE		
⚠	D2535	EU2A-T3	SI.DIODE		
⚠	D2536	EU2A-LFF4	SI.DIODE		
	D2537	SLR-34VC3F	L.E.D.	RELAY OFF	
⚠	D2538	RU4AM-C1	SI.DIODE		
	D2539	1S2473H-T2	SI.DIODE		
	D2540-41	1SS133-T2	SI.DIODE		
⚠	D2542	EU2A-LFF4	SI.DIODE		
	TRANSISTOR				
	Q2301-03	2SC1740(E)-T	SI.TRANSISTOR		
	Q2304	2SA1499(QPO)	SI.TRANSISTOR		
⚠	Q2305	2SA1499(QPO)	SI.TRANSISTOR		
	Q2306	2SC1740(E)-T	SI.TRANSISTOR		
	Q2401-03	2SC3311A(QR)-T	SI.TRANSISTOR		
	Q2405-06	DTC124XS-T	DIGI TRANSISTOR		
	Q2409-12	2SC3311A(QR)-T	SI.TRANSISTOR		
	Q2413-16	2SA1309A(QR)-T	SI.TRANSISTOR		
	Q2417-18	2SC3311A(QR)-T	SI.TRANSISTOR		
	Q2419	2SA1309A(QR)-T	SI.TRANSISTOR		
	Q2420	2SC3311A(QR)-T	SI.TRANSISTOR		
	Q2421	2SA1309A(QR)-T	SI.TRANSISTOR		
	Q2422-23	2SC3311A(QR)-T	SI.TRANSISTOR		
	Q2501	2SC3311A(QR)-T	SI.TRANSISTOR		
	Q2502	2SA1309A(QR)-T	SI.TRANSISTOR		
	Q2503	2SC2653-RL	SI.TRANSISTOR		
⚠	Q2504	2SC4758-LB	SI.TRANSISTOR		
	Q2505	2SA1015(YG)-T	SI.TRANSISTOR		
	Q2506	2SC1162(C)	SI.TRANSISTOR		
	Q2507	2SC3311A(QR)-T	SI.TRANSISTOR		
	Q2508	2SA1309A(QR)-T	SI.TRANSISTOR		
	Q2509	2SD1266A(QP)	SI.TRANSISTOR		
	Q2510	2SC3311A(QR)-T	SI.TRANSISTOR		
	Q2511-12	2SA1309A(QR)-T	SI.TRANSISTOR		
	Q2513	2SC2653-RL	SI.TRANSISTOR		
⚠	Q2514	2SC3884A-LB	SI.TRANSISTOR		
⚠	Q2517	2SD1090	SI.TRANSISTOR		
	Q2518	2SC2229(Y)-T	SI.TRANSISTOR		
⚠	Q2519	2SA949(Y)C1-T	SI.TRANSISTOR		
⚠	Q2520	SF0R1A42	THYRISTOR		
	Q2521	2SC1573(PQR)	SI.TRANSISTOR		
	Q2522	2SC2229(Y)-T	SI.TRANSISTOR		
⚠	Q2523	2SC1573(PQR)	SI.TRANSISTOR		
	Q2524	DTC114YS-T	DIGI TRANSISTOR		
	Q2525	DTC144ES-T	DIGI TRANSISTOR		
⚠	Q2526	IRF620	F.E.T.		
	IC				
⚠	IC2101	UPC2412HF	I.C.(MONO-ANA)		
	IC2102	TA78L12S-Y	I.C.		

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⚠	Symbol No.	Part No.	Part Name	Description	Local
	IC				
	IC2301	UPC358C	I.C.(MONO-ANA)		
	IC2401	TC4538BP	I.C.(DIGI-MOS)		
	IC2402	AN5422K	I.C.		
⚠	IC2403	LA7838	I.C.(MONO-ANA)		
	IC2404	TC4052BP	I.C.(DIGI-MOS)		
	IC2405	UPC358C	I.C.(MONO-ANA)		
	IC2406	TC4538BP	I.C.(DIGI-MOS)		
⚠	IC2501	UPC358C	I.C.(MONO-ANA)		
⚠	IC2502	UPC358C	I.C.(MONO-ANA)		
⚠	IC2503	UPC358C	I.C.(MONO-ANA)		
	OTHERS				
⚠	PC2504	TLP621(GB)	I.C.(PH COUPLER)		
	S2401	QSL4A13-C03Z	LEVER SWITCH	V.BLK ADJ	

5. CRT SOCKET PWB ASS'Y (PU-3000A-H1)

⚠	Symbol No.	Part No.	Part Name	Description	Local
	VARIABLE RESISTOR				
	R3319	QVPC623-201HZ	TRIM R	2kΩ B R DRIVE	
	R3320	QVPC623-201HZ	TRIM R	2kΩ B G DRIVE	
	R3366	QVPCE01-205M	V R	2MΩ B B SCREEN	
	R3369	QVPCE01-205M	V R	2MΩ B G SCREEN	
	R3393	QVPCE01-205M	V R	2MΩ B R SCREEN	
	RESISTOR				
	R3304-06	QRG029J-153	OM R	15kΩ 2W J	
	R3307-09	QRG029J-183	OM R	18kΩ 2W J	
	R3371-73	QRD149J-102S	C R	1kΩ 1/4W J	
	CAPACITOR				
⚠	C3310	QETC2EM-475Z	E CAP.	4.7μF 250V M	
	C3360	QFP32GK-563M	PP CAP.	0.056μF 400V K	
	C3361	QFH63BK-103M	MM CAP.	0.01μF 1250V K	
	C3362-63	QFZ0097-103M	M M CAP.	0.01μF 1250V K	
⚠	C3381	QETC2EM-106Z	E CAP.	10μF 250V M	
	COIL				
	L3301-03	CELP026-470Z	PEAKING COIL	47μH	
	L3304-06	CELP026-180Z	PEAKING COIL	18μH	
	DIODE				
	D3301-02	MA165-T2	SI.DIODE		
	D3310-12	MA165-T2	SI.DIODE		
	D3324-26	1SS244-T2	SI.DIODE		
	D3327	MA165-T2	SI.DIODE		
	D3329	MA165-T2	SI.DIODE		
	D3352	RD8.2E(B2)-T2	ZENER DIODE		
	D3360	TVR4J-T3	SI.DIODE		
	D3374	MA4091(M)-T2	ZENER DIODE		
	D3375-76	1SS82-T2	SI.DIODE		
	TRANSISTOR				
	Q3301-03	2SC4502-T	SI.TRANSISTOR		
	Q3304-06	2SC3942-RL	SI.TRANSISTOR		
	Q3311	2SA1309A(QR)-T	SI.TRANSISTOR		
	Q3351	2SC1740(QR)-T	SI.TRANSISTOR		
	Q3352	2SC1740S(QR)-T	SI.TRANSISTOR		
	Q3353	2SA1309A(QR)-T	SI.TRANSISTOR		
	Q3354	2SC1740S(QR)-T	SI.TRANSISTOR		
	Q3355-56	2SA1309A(QR)-T	SI.TRANSISTOR		
⚠	Q3371	2SA1321	SI.TRANSISTOR		
⚠	Q3372	2SA1321	SI.TRANSISTOR		
⚠	Q3373	2SA1321	SI.TRANSISTOR		
	Q3374-75	2SA1309A(QR)-T	SI.TRANSISTOR		
	Q3376-77	2SC3311A(QR)-T	SI.TRANSISTOR		
⚠	Q3381	2SC3334	SI.TRANSISTOR		
⚠	Q3382	2SC3334	SI.TRANSISTOR		
⚠	Q3383	2SC3334	SI.TRANSISTOR		
	Q3384-85	2SC2878(B)-T	SI.TRANSISTOR		
	OTHERS				
⚠		CE41602-001	C.R.T.SOCKET	×3	
	S3301	QSL4A13-C03Z	LEVER SWITCH	G SIGNAL CUT	
	S3302	QSL4A13-C03Z	LEVER SWITCH	B SIGNAL CUT	
	S3303	QSL4A13-C03Z	LEVER SWITCH	R SIGNAL CUT	
	SG3301-03	CE41680-501	ARESTOR		
	VA3301-03	ERZ-C05ZJ361	VARISTOR	360V	

6. AUDIO PWB ASS'Y (PU-6000A-H1)

⚠	Symbol No.	Part No.	Part Name	Description			Local
	RESISTOR						
	R6002	QRD149J-470S	C R	47 Ω	1/4W	J	
⚠	R6103	QRD149J-560S	C R	56 Ω	1/4W	J	
⚠	R6111	QRD149J-2R2S	C R	2.2 Ω	1/4W	J	
⚠	R6114	QRD149J-2R2S	C R	2.2 Ω	1/4W	J	
⚠	R6203	QRD149J-560S	C R	56 Ω	1/4W	J	
⚠	R6211	QRD149J-2R2S	C R	2.2 Ω	1/4W	J	
⚠	R6214	QRD149J-2R2S	C R	2.2 Ω	1/4W	J	
⚠	R6303	QRD149J-560S	C R	56 Ω	1/4W	J	
⚠	R6311	QRD149J-2R2S	C R	2.2 Ω	1/4W	J	
	CAPACITOR						
⚠	C6002	QETC1EM-107Z	E CAP.	100 μ F	25V	M	
	C6004-05	QEN61CM-106Z	BP E CAP.	10 μ F	16V	M	
⚠	C6010	QETB1VM-338	E CAP.	3300 μ F	35V	M	
	C6011-12	QEN61HM-105Z	BP E CAP.	1 μ F	50V	M	
	C6015-16	QEN61HM-225Z	BP E CAP.	2.2 μ F	50V	M	
	C6017-21	QEN61CM-106Z	BP E CAP.	10 μ F	16V	M	
	C6101	QEN61HM-225Z	BP E CAP.	2.2 μ F	50V	M	
	C6102-07	QFLC1HJ-104MZ	M CAP.	0.1 μ F	50V	J	
	C6108	QEN61HM-225Z	BP E CAP.	2.2 μ F	50V	M	
	C6109-10	QFLC1HJ-272MZ	M CAP.	2700 p F	50V	J	
	C6116-17	QEN61HM-225Z	BP E CAP.	2.2 μ F	50V	M	
	C6121	QFV71HJ-124MZ	TF CAP.	0.12 μ F	50V	J	
⚠	C6124	QETB1VM-108	E CAP.	1000 μ F	35V	M	
	C6125	QFV71HJ-124MZ	TF CAP.	0.12 μ F	50V	J	
⚠	C6126	QETB1VM-108	E CAP.	1000 μ F	35V	M	
⚠	C6127	QETB1VM-108	E CAP.	1000 μ F	35V	M	
	C6201	QEN61HM-225Z	BP E CAP.	2.2 μ F	50V	M	
	C6202-07	QFLC1HJ-104MZ	M CAP.	0.1 μ F	50V	J	
	C6208	QEN61HM-225Z	BP E CAP.	2.2 μ F	50V	M	
	C6209-10	QFLC1HJ-272MZ	M CAP.	2700 p F	50V	J	
	C6216-17	QEN61HM-225Z	BP E CAP.	2.2 μ F	50V	M	
	C6221	QFV71HJ-124MZ	TF CAP.	0.12 μ F	50V	J	
⚠	C6224	QETB1VM-108	E CAP.	1000 μ F	35V	M	
	C6225	QFV71HJ-124MZ	TF CAP.	0.12 μ F	50V	J	
⚠	C6226	QETB1VM-108	E CAP.	1000 μ F	35V	M	
⚠	C6227	QETB1VM-108	E CAP.	1000 μ F	35V	M	
	C6301	QEN61HM-225Z	BP E CAP.	2.2 μ F	50V	M	
	C6302-07	QFLC1HJ-104MZ	M CAP.	0.1 μ F	50V	J	
	C6308	QEN61HM-225Z	BP E CAP.	2.2 μ F	50V	M	
	C6309-10	QFLC1HJ-272MZ	M CAP.	2700 p F	50V	J	
	C6317	QEN61HM-225Z	BP E CAP.	2.2 μ F	50V	M	
	C6321	QFV71HJ-124MZ	TF CAP.	0.12 μ F	50V	J	
⚠	C6324	QETB1VM-108	E CAP.	1000 μ F	35V	M	
⚠	C6326	QETB1VM-108	E CAP.	1000 μ F	35V	M	
	DIODE						
	D6001	MA165-T2	SI.DIODE				
	D6005-06	MA165-T2	SI.DIODE				
	D6101	RD9.1ES(B2)-T2	ZENER DIODE				
	D6105-06	RD33ES(B1)-T2	ZENER DIODE				
	D6201	RD9.1ES(B2)-T2	ZENER DIODE				
	D6205-06	RD33ES(B1)-T2	ZENER DIODE				
	D6301	RD9.1ES(B2)-T2	ZENER DIODE				
	D6305	RD33ES(B1)-T2	ZENER DIODE				
	TRANSISTOR						
	Q6001-02	DTC323TS-T	DIGI.TRANSISTOR				
	Q6003	2SA1309A(QR)-T	SI.TRANSISTOR				
	Q6006	2SC3311A(QR)-T	SI.TRANSISTOR				
	Q6007	2SA1309A(QR)-T	SI.TRANSISTOR				
	Q6101	2SC3311A(QR)-T	SI.TRANSISTOR				
	Q6201	2SC3311A(QR)-T	SI.TRANSISTOR				
	Q6301	2SC3311A(QR)-T	SI.TRANSISTOR				

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⚠ Symbol No.	Part No.	Part Name	Description	Local
I C				
⚠ IC6001	TA79L012P-Y	I.C.		
IC6003	XRA15218N	I.C.(MONO-ANA)		
IC6004-06	TDA7314	I C		
⚠ IC6007	MC13516T2	I.C.(MONO-ANA)		
⚠ IC6008	MC13516T2	I.C.(MONO-ANA)		
⚠ IC6009	MC13516T2	I.C.(MONO-ANA)		
OTHERS				
J001	CEMT003-003	PUSH TERMINAL	EXT SPEAKER	
S001	QSS4C22-C04	SLIDE SWITCH	INT-EXT	

7. MICON PWB ASS'Y (PU-7000A-H1)

⚠	Symbol No.	Part No.	Part Name	Description	Local
	RESISTOR				
	R7901	QRG039J-151	OM R	150 Ω 3W J	
	R7920	QRG029J-180	OM R	18 Ω 2W J	
	R7921	QRG039J-820	OM R	82 Ω 3W J	
	R7922	QRG019J-681S	OM R	680 Ω 1W J	
	CAPACITOR				
	C7103	QFLC1HJ-332MZ	M CAP.	3300 pF 50V J	
	C7106	QEN61HM-105Z	BP E CAP.	1 µF 50V M	
	C7107	QFLC1HJ-153MZ	M CAP.	0.015 µF 50V J	
	C7301	QFV71HJ-104MZ	TF CAP.	0.1 µF 50V J	
	C7305	QFV71HJ-104MZ	TF CAP.	0.1 µF 50V J	
	C7405	CECN003-101	NET CAP.	100 pF	
	C7423	QFLC1HJ-683MZ	M CAP.	0.068 µF 50V J	
	C7430	QFLC1HJ-333MZ	M CAP.	0.033 µF 50V J	
	C7431	QFV71HJ-104MZ	TF CAP.	0.1 µF 50V J	
⚠	C7901	QETC1VM-476Z	E CAP.	47 µF 35V M	
	C7905	QFV71HJ-104MZ	TF CAP.	0.1 µF 50V J	
	C7913	QFV71HJ-104MZ	TF CAP.	0.1 µF 50V J	
	COIL				
	L7101	CELP058-6R8Z	PEAKING COIL	6.8 µH	
	L7401	CELP027-220Z	PEAKING COIL	22 µH	
	L7402	CELP026-4R7Z	PEAKING COIL	4.7 µH	
	DIODE				
	D7101	1SS133-T2	SI.DIODE		
	D7401	MA4051(H)-T2	ZENER DIODE		
	D7402-05	MA4056(M)-T2	ZENER DIODE		
	D7406	MA4068(M)-T2	ZENER DIODE		
	D7407	MA4056(M)-T2	ZENER DIODE		
	D7410	MA4056(M)-T2	ZENER DIODE		
	D7501-02	1SS133-T2	SI.DIODE		
	D7901	1SS146-T2	SI.DIODE		
	D7902	MA165-T2	SI.DIODE		
	D7905	S1WB(A)10	SI.DIODE		
	D7907	1SS133-T2	SI.DIODE		
	D7910-11	1SS133-T2	SI.DIODE		
	TRANSISTOR				
	Q7101-02	2SC3311A(QR)-T	SI.TRANSISTOR		
	Q7501	2SC3311A(QR)-T	SI.TRANSISTOR		
	Q7901-04	2SC3311A(QR)-T	SI.TRANSISTOR		
	IC				
	IC7101	LA7945	I.C.		
	IC7102	LC7458A-02	I.C.		
	IC7104	MN1280-Q	I.C.(DIGI-MOS)		
	IC7301	M50253P	I.C.(M)		
	IC7302	TC4021BP	I.C.		
	IC7401	MN1873221JGW3	I.C.		
	IC7402	MN1280-K	I.C.(DIGI-MOS)		
	IC7403	AT93C66-10PC	I.C.		
	IC7501	M50255P	I.C.(M)		
⚠	IC7901	UPC2412HF	I.C.(MONO-ANA)		
⚠	IC7902	AN7805F	I.C.(MONO-ANA)		
	IC7903	TA78L005AP-Y	I.C.(H)		
	OTHERS				
		CM45870-001	SHIELD PLATE		
	CF7101	CSA12.0MT	CER.RESONATOR		
	CF7401	CST4.00MGW-Z	CERAMIC RESONATO		
	S7401	QSL4A13-C03Z	LEVER SWITCH	SERVICE SW	

8. CONVER PWB ASS'Y (PU-8000A-H1)

⚠ Symbol No.	Part No.	Part Name	Description	Local
VARIABLE RESISTOR				
R8137	QVPC627-502MZ	TRIM R	5kΩ B H-BLANK.PULSE PHASE CORRECT.	
R8427	QVPC627-502MZ	TRIM R	5kΩ B GH KEY	
R8428	QVPC627-502MZ	TRIM R	5kΩ B GH KEYS	
R8430	QVPC627-502MZ	TRIM R	5kΩ B GH KEYS B	
R8431	QVPC627-502MZ	TRIM R	5kΩ B GH R SIZE	
R8432	QVPC627-502MZ	TRIM R	5kΩ B GH L SIZE	
R8433	QVPC627-502MZ	TRIM R	5kΩ B GH BOW	
R8434	QVPC627-502MZ	TRIM R	5kΩ B GH R PIN1	
R8435	QVPC627-502MZ	TRIM R	5kΩ B GH L PIN1	
R8436	QVPC627-502MZ	TRIM R	5kΩ B GH R LIN2	
R8437	QVPC627-502MZ	TRIM R	5kΩ B GH L LIN2	
R8438	QVPC627-502MZ	TRIM R	5kΩ B GH CINEMA PIN	
R8441	QVPC627-502MZ	TRIM R	5kΩ B GH PANORAMA R SIZE	
R8442	QVPC627-502MZ	TRIM R	5kΩ B GH PANORAMA L SIZE	
R8443	QVPC627-502MZ	TRIM R	5kΩ B GH CINEMA R SIZE	
R8444	QVPC627-502MZ	TRIM R	5kΩ B GH CINEMA L SIZE	
R8445	QVPC627-502MZ	TRIM R	5kΩ B GH R PIN2	
R8446	QVPC627-502MZ	TRIM R	5kΩ B GH L PIN2	
R8476	QVPC627-502MZ	TRIM R	5kΩ B GV KEY	
R8478	QVPC627-502MZ	TRIM R	5kΩ B GV KEYS	
R8479	QVPC627-502MZ	TRIM R	5kΩ B GV KEYS B	
R8480	QVPC627-502MZ	TRIM R	5kΩ B GV PIN	
R8481	QVPC627-502MZ	TRIM R	5kΩ B GV UP SIZE	
R8482	QVPC627-502MZ	TRIM R	5kΩ B GV LOW SIZE	
R8483	QVPC627-502MZ	TRIM R	5kΩ B GV LIN	
R8484	QVPC627-502MZ	TRIM R	5kΩ B GV BOW	
R8488	QVPC627-502MZ	TRIM R	5kΩ B GV CINEMA KEY	
R8527	QVPC627-502MZ	TRIM R	5kΩ B RH KEY	
R8528	QVPC627-502MZ	TRIM R	5kΩ B RH KEYS	
R8530	QVPC627-502MZ	TRIM R	5kΩ B RH KEYS B	
R8531	QVPC627-502MZ	TRIM R	5kΩ B RH R SIZE	
R8532	QVPC627-502MZ	TRIM R	5kΩ B RH L SIZE	
R8533	QVPC627-502MZ	TRIM R	5kΩ B RH BOW	
R8534	QVPC627-502MZ	TRIM R	5kΩ B RH R PIN1	
R8535	QVPC627-502MZ	TRIM R	5kΩ B RH L PIN1	
R8536	QVPC627-502MZ	TRIM R	5kΩ B RH R LIN2	
R8537	QVPC627-502MZ	TRIM R	5kΩ B RH L LIN2	
R8538	QVPC627-502MZ	TRIM R	5kΩ B RH CINEMA PIN	
R8539	QVPC627-502MZ	TRIM R	5kΩ B RH R LIN1	
R8540	QVPC627-502MZ	TRIM R	5kΩ B RH L LIN1	
R8541	QVPC627-502MZ	TRIM R	5kΩ B RH PANORAMA R SIZE	
R8542	QVPC627-502MZ	TRIM R	5kΩ B RH PANORAMA L SIZE	
R8543	QVPC627-502MZ	TRIM R	5kΩ B R CINEMA R SIZE	
R8544	QVPC627-502MZ	TRIM R	5kΩ B R CINEMA L SIZE	
R8545	QVPC627-502MZ	TRIM R	5kΩ B R R PIN2	
R8546	QVPC627-502MZ	TRIM R	5kΩ B R L PIN2	
R8576	QVPC627-502MZ	TRIM R	5kΩ B RV KEY	
R8578	QVPC627-502MZ	TRIM R	5kΩ B RV KEYS	
R8579	QVPC627-502MZ	TRIM R	5kΩ B RV KEYS B	
R8580	QVPC627-502MZ	TRIM R	5kΩ B RV PIN	
R8581	QVPC627-502MZ	TRIM R	5kΩ B RV UP SIZE	
R8582	QVPC627-502MZ	TRIM R	5kΩ B RV LOW SIZE	
R8583	QVPC627-502MZ	TRIM R	5kΩ B RV LIN	
R8584	QVPC627-502MZ	TRIM R	5kΩ B RV BOW	
R8585	QVPC627-502MZ	TRIM R	5kΩ B RV UP KEYS	
R8586	QVPC627-502MZ	TRIM R	5kΩ B RV L KEYS	
R8587	QVPC627-502MZ	TRIM R	5kΩ B RV UP L KEYS	
R8588	QVPC627-502MZ	TRIM R	5kΩ B RV CINEMA KEYS	
R8589	QVPC627-502MZ	TRIM R	5kΩ B RV VS H3	
R8627	QVPC627-502MZ	TRIM R	5kΩ B BH KEY	
R8628	QVPC627-502MZ	TRIM R	5kΩ B BH KEYS	
R8630	QVPC627-502MZ	TRIM R	5kΩ B BH KEYS B	
R8631	QVPC627-502MZ	TRIM R	5kΩ B BH R SIZE	
R8632	QVPC627-502MZ	TRIM R	5kΩ B BH L SIZE	

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⚠ Symbol No.	Part No.	Part Name	Description	Local
VARIABLE RESISTOR				
R8633	QVPC627-502MZ	TRIM R	5kΩ B BH BOW	
R8634	QVPC627-502MZ	TRIM R	5kΩ B BH R PIN1	
R8635	QVPC627-502MZ	TRIM R	5kΩ B BH L PIN1	
R8636	QVPC627-502MZ	TRIM R	5kΩ B BH R LIN2	
R8637	QVPC627-502MZ	TRIM R	5kΩ B BH L LIN2	
R8638	QVPC627-502MZ	TRIM R	5kΩ B BH CINEMA PIN	
R8639	QVPC627-502MZ	TRIM R	5kΩ B BH R LIN1	
R8640	QVPC627-502MZ	TRIM R	5kΩ B BH L LIN1	
R8641	QVPC627-502MZ	TRIM R	5kΩ B BH PANORAMA R SIZE	
R8642	QVPC627-502MZ	TRIM R	5kΩ B BH PANORAMA L SIZE	
R8643	QVPC627-502MZ	TRIM R	5kΩ B B CINEMA R SIZE	
R8644	QVPC627-502MZ	TRIM R	5kΩ B B CINEMA L SIZE	
R8645	QVPC627-502MZ	TRIM R	5kΩ B B R PIN2	
R8646	QVPC627-502MZ	TRIM R	5kΩ B B L PIN2	
R8676	QVPC627-502MZ	TRIM R	5kΩ B BV KEY	
R8678	QVPC627-502MZ	TRIM R	5kΩ B BV KEYS	
R8679	QVPC627-502MZ	TRIM R	5kΩ B BV KEYS B	
R8680	QVPC627-502MZ	TRIM R	5kΩ B BV PIN	
R8681	QVPC627-502MZ	TRIM R	5kΩ B BV UP SIZE	
R8682	QVPC627-502MZ	TRIM R	5kΩ B BV LOW SIZE	
R8683	QVPC627-502MZ	TRIM R	5kΩ B BV LIN	
R8684	QVPC627-502MZ	TRIM R	5kΩ B BV BOW	
R8685	QVPC627-502MZ	TRIM R	5kΩ B BV UP KEYS	
R8686	QVPC627-502MZ	TRIM R	5kΩ B BV L KEYS	
R8687	QVPC627-502MZ	TRIM R	5kΩ B BV UP L KEYS	
R8688	QVPC627-502MZ	TRIM R	5kΩ B BV CINEMA KEYS	
R8689	QVPC627-502MZ	TRIM R	5kΩ B BV VS H3	
R8771	QVPC627-203MZ	TRIM R	20kΩ B RH-STATIC	
R8776	QVPC627-203MZ	TRIM R	20kΩ B RV-STATIC	
R8781	QVPC627-203MZ	TRIM R	20kΩ B BH-STATIC	
R8786	QVPC627-203MZ	TRIM R	20kΩ B BV-STATIC	
RESISTOR				
R8805	QRG039J-221A	OM R	220 Ω 3W J	
R8806-07	QRX039J-3R3A	MF R	3.3 Ω 3W J	
R8815	QRG039J-221A	OM R	220 Ω 3W J	
R8816-17	QRX039J-3R3A	MF R	3.3 Ω 3W J	
R8825	QRG039J-221A	OM R	220 Ω 3W J	
R8826-27	QRX039J-3R3A	MF R	3.3 Ω 3W J	
R8835	QRG039J-221A	OM R	220 Ω 3W J	
R8836-37	QRX039J-3R3A	MF R	3.3 Ω 3W J	
R8845	QRG039J-221A	OM R	220 Ω 3W J	
R8846-47	QRX039J-3R3A	MF R	3.3 Ω 3W J	
R8855	QRG039J-221A	OM R	220 Ω 3W J	
R8856-57	QRX039J-3R3A	MF R	3.3 Ω 3W J	
CAPACITOR				
C8102	QFLC1HJ-472MZ	M CAP.	4700 pF 50V J	
C8103	QEN61HM-335Z	BP E CAP.	3.3 μF 50V M	
C8104	QFV71HJ-224MZ	TF CAP.	0.22 μF 50V J	
C8106	QEN61CM-106Z	BP E CAP.	10 μF 16V M	
C8108	QEN61HM-105Z	BP E CAP.	1 μF 50V M	
C8117	QFV71HJ-105MZ	TF CAP.	1 μF 50V J	
C8118	QFLC1HJ-152MZ	M CAP.	1500 pF 50V J	
C8119	QEN61HM-225Z	BP E CAP.	2.2 μF 50V M	
C8121	QFLC1HJ-472MZ	M CAP.	4700 pF 50V J	
C8122	QFV71HJ-104MZ	TF CAP.	0.1 μF 50V J	
C8123	QFV71HJ-124MZ	TF CAP.	0.12 μF 50V J	
C8142	QFP31HJ-472SZ	PP CAP.	4700 pF 50V J	
C8143	QFLC1HJ-272MZ	M CAP.	2700 pF 50V J	
C8303	QEN61CM-106Z	BP E CAP.	10 μF 16V M	
C8309-10	QEN61CM-106Z	BP E CAP.	10 μF 16V M	
C8771-74	QFV71HJ-105MZ	TF CAP.	1 μF 50V J	
C8802	QEHC1HM-476MZ	E CAP.	47 μF 50V M	
C8804	QEHC1HM-476MZ	E CAP.	47 μF 50V M	

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⚠	Symbol No.	Part No.	Part Name	Description			Local
	CAPACITOR						
	C8805	QEHC1VM-476MZ	E CAP.	47μF	35V	M	
	C8812	QEHC1HM-476MZ	E CAP.	47μF	50V	M	
	C8814	QEHC1HM-476MZ	E CAP.	47μF	50V	M	
	C8815	QEHC1VM-476MZ	E CAP.	47μF	35V	M	
	C8822	QEHC1HM-476MZ	E CAP.	47μF	50V	M	
	C8824	QEHC1HM-476MZ	E CAP.	47μF	50V	M	
	C8825	QEHC1VM-476MZ	E CAP.	47μF	35V	M	
⚠	C8901	QETB1VM-227	E CAP.	220μF	35V	M	
⚠	C8902	QETB1VM-227	E CAP.	220μF	35V	M	
⚠	C8903	QETC1HM-105Z	E CAP.	1μF	50V	M	
⚠	C8904	QETC1HM-475Z	E CAP.	4.7μF	50V	M	
⚠	C8905	QETC1HM-475Z	E CAP.	4.7μF	50V	M	
⚠	C8906	QETB1VM-227	E CAP.	220μF	35V	M	
⚠	C8907	QETB1VM-227	E CAP.	220μF	35V	M	
	COIL						
	L8901-04	CELC021-470	CHOKE COIL	47μH			
	DIODE						
	D8251-52	RD8.2ES(B1)-T2	ZENER DIODE				
	D8253-56	1SS133-T2	SI.DIODE				
	D8301-02	1SS133-T2	SI.DIODE				
	D8305-08	1SS133-T2	SI.DIODE				
	D8311-18	1SS133-T2	SI.DIODE				
	D8321-24	1SS133-T2	SI.DIODE				
	D8802-05	RD33E(B1)-T2	ZENER DIODE				
	D8812-15	RD33E(B1)-T2	ZENER DIODE				
	D8822-25	RD33E(B1)-T2	ZENER DIODE				
	TRANSISTOR						
⚠	Q8901	2SD1276A(QP)	POWER TRANSISTOR				
⚠	Q8902	2SB950A(QP)	POWER TRANSISTOR				
	IC						
	IC8101	PA0036	I.C.				
	IC8103	TC4538BP	I.C.(DIGI-MOS)				
	IC8201-02	M5218AL	I.C.				
	IC8204	M5218AL	I.C.				
	IC8253-55	MC14052BCP	I.C.(DIGI-MOS)				
	IC8301-03	M5218AL	I.C.				
	IC8701-11	M5218AL	I.C.				
⚠	IC8801	STK4274	I.C.				
⚠	IC8802	STK4274	I.C.				
⚠	IC8803	STK4274	I.C.				
⚠	IC8901	M5230L	I.C.(M)				
⚠	IC8902	NJM7812FA	I.C.(MONO-ANA)				
⚠	IC8903	NJM7912FA	I.C.(MONO-ANA)				
	IC8904	NJM7805FA	I.C.(MONO-ANA)				
	IC8905	NJM7905FA	I.C.				

C9107 QCS32HJ-221UZ
C9108 QCS31HJ-271

9. POWER PWB ASS'Y (PU-9000A-H1)

⚠	Symbol No.	Part No.	Part Name	Description	Local
	RESISTOR				
⚠	R9002	QRC121K-105Z	COMP.R	1MΩ 1/2W K	
⚠	R9101	QRF154K-1R0	UNF R	1 Ω 15W K	
	R9104	QRG039J-103	OM R	10kΩ 3W J	
⚠	R9105	QRD121J-3R9SY	C R	3.9 Ω	
	R9109	QRM055K-R10	MP R	0.1 Ω 5W K	
	R9201	QRG019J-223S	OM R	22kΩ 1W J	
⚠	R9203	QRD149J-101S	C R	100 Ω 1/4W J	
	R9210	QRG029J-151A	OM R	150 Ω 2W J	
	CAPACITOR				
⚠	C9001	QFZ9036-224M	M F CAP.	0.22 μ FAC250V M	
⚠	C9002	QFZ9036-224M	M F CAP.	0.22 μ FAC250V M	
⚠	C9003	QCZ9033-222A	C CAP.	2200 p FAC125V M	
⚠	C9004	QCZ9033-222A	C CAP.	2200 p FAC125V M	
⚠	C9005	QFZ9036-104M	M F CAP.	0.1 μ FAC250V M	
⚠	C9101	QFZ9036-104M	M F CAP.	0.1 μ FAC250V M	
⚠	C9102	QFZ9036-104M	M F CAP.	0.1 μ FAC250V M	
⚠	C9103	QCZ9033-222A	C CAP.	2200 p FAC125V M	
⚠	C9104	QCZ9033-222A	C CAP.	2200 p FAC125V M	
	C9105	QFH52EK-103M	MM CAP.	0.01 μ F 250V K	
⚠	C9106	QEZ0110-108R	E CAP.	1000 μ F 200V M	
	C9109	QCZ0131-332A	C CAP.	3300 p F 2kV M	
⚠	C9112	QCZ9033-472A	C CAP.	4700 p FAC125V M	
	C9113	QCZ0131-332A	C CAP.	3300 p F 2kV M	
⚠	C9202	QETB1VM-108	E CAP.	1000 μ F 35V M	
⚠	C9203	QETB1VM-338	E CAP.	3300 μ F 35V M	
⚠	C9205	QEHB1EM-478M	E CAP.	4700 μ F 25V M	
⚠	C9206	QETC1EM-477Z	E CAP.	470 μ F 25V M	
⚠	C9208	QEHB1HM-477M	E CAP.	470 μ F 50V M	
⚠	C9209	QETC1HM-107Z	E CAP.	100 μ F 50V M	
⚠	C9211	QEHB1HM-477M	E CAP.	470 μ F 50V M	
⚠	C9212	QETC1HM-107Z	E CAP.	100 μ F 50V M	
⚠	C9214	QEH72CM-337M	E CAP.	330 μ F 160V M	
⚠	C9215	QETB2CM-227	E CAP.	220 μ F 160V M	
⚠	C9217	QCZ9033-472A	C CAP.	4700 p FAC125V M	
⚠	C9218	QCZ9033-222A	C CAP.	2200 p FAC125V M	
	C9231	QEN61VM-475Z	BP E CAP.	4.7 μ F 35V M	
	TRANSFORMER				
⚠	T9101	CE41993-001	POWER TRANSF.		
⚠	T9102	CE42353-003-J	SW REACTOR		
	COIL				
	L9201-05	CELC021-470	CHOKE COIL	47 μ H	
	DIODE				
	D9001	1SS133-T2	SI.DIODE		
⚠	D9101	RBV-406M	BRIDGE DIODE		
	D9102-03	EU2A-T3	SI.DIODE		
⚠	D9201	D5S9M	S B DIODE		
⚠	D9202	D4L20U	SI.DIODE		
⚠	D9203	D4L20U	SI.DIODE		
⚠	D9204	D4L20U	SI.DIODE		
⚠	D9205	D5L60	SI.DIODE		
	D9210-15	1SS133-T2	SI.DIODE		
	TRANSISTOR				
	Q9201	2SA1309A(QR)-T	SI.TRANSISTOR		
	Q9202	2SC2229(Y)-T	SI.TRANSISTOR		
	Q9203	2SC3311A(QR)-T	SI.TRANSISTOR		
	I C				
⚠	IC9101	STK711-550	I.C.		
⚠	IC9102	TLP621(GB)	I.C.(PH COUPLER)		
⚠	IC9201	SE130N	I.C.		

PU-9000A-H1

⚠ Symbol No.	Part No.	Part Name	Description	Local
OTHERS				
⚠ F9001	QMF51U1-8R0S	FUSE	8.0A	
K9201-02	CE41724-00A	BEADS CORE		
K9203-04	CE42050-001Z	CORE		
K9205-07	CE41433-001Z	BEADS CORE		
⚠ LF9001	CE41775-006	LINE FILTER		
⚠ LF9101	CE41775-006	LINE FILTER		
⚠ RY9001	CESK006-005	RELAY		
⚠ VA9001	ERZ-C10DK361U	ZINC N RESISTOR	360 Ω	

10. ASPECT CONVERTER PWB ASS'Y (EZ-1D002A)

⚠ Symbol No.	Part No.	Part Name	Description	Local
VARIABLE RESISTOR				
R1603	CEVP005-473XM	CH V R	47kΩ B L PIP POSITION	
R1605	CEVP005-473XM	CH V R	47kΩ B PIP POSITION	
R1607	CEVP005-473XM	CH V R	47kΩ B R PIP POSITION	
R1720	CEVP005-682XM	CH V R	6.8kΩ B PIP COLOR CONT.	
R1722	CEVP005-102XM	CH V R	1kΩ B PIP TINT CONT.	
R1725	CEVP005-103XM	CH V R	10kΩ B R-Y LEVEL CONT.	
RESISTOR				
R1701	QRG029J-180A	OM R	18 Ω 2W J	
R1912-14	QRZ0099-102	LADDER R	1kΩ	
CAPACITOR				
C1004	NCB21HK-103AY	CHIP CAP.	0.01 μF 50V K	
C1101	NCF21HZ-104AY	CHIP C CAP.	0.1 μF 50V Z	
C1103-05	NCF21HZ-104AY	CHIP C CAP.	0.1 μF 50V Z	
C1107-09	NCF21HZ-104AY	CHIP C CAP.	0.1 μF 50V Z	
C1111-22	NCF21HZ-104AY	CHIP C CAP.	0.1 μF 50V Z	
C11221	NEA11CM-476RP	CHIP AL E CAP.	47 μF 16V M	
C1123-25	NCF21HZ-104AY	CHIP C CAP.	0.1 μF 50V Z	
C1128-29	NCF21HZ-104AY	CHIP C CAP.	0.1 μF 50V Z	
C1130-31	NEA11CM-476RP	CHIP AL E CAP.	47 μF 16V M	
C1134-36	NCF21HZ-104AY	CHIP C CAP.	0.1 μF 50V Z	
C1140	NCF21HZ-104AY	CHIP C CAP.	0.1 μF 50V Z	
C1141	NEA11CM-476RP	CHIP AL E CAP.	47 μF 16V M	
C1142-43	NEA11HM-105RZ	CHIP AL E CAP.	1 μF 50V M	
C1150	NEA10JM-107RP	CHIP AL E CAP.	100 μF 6.3V M	
C1160-61	NCF21HZ-104AY	CHIP C CAP.	0.1 μF 50V Z	
C1170-71	NCT03CH-101AY	CHIP CAP.	100 pF 50V J	
C1201	NCF21HZ-104AY	CHIP C CAP.	0.1 μF 50V Z	
C1202-03	NEA11CM-476RP	CHIP AL E CAP.	47 μF 16V M	
C1204-05	NEA11CM-106RZ	CHIP AL E CAP.	10 μF 16V M	
C1206	NCT03CH-331AY	CHIP CAP.	330 pF 50V J	
C1207	NCB21HK-473AY	CHIP CAP.	0.047 μF 50V K	
C1208	NCT03CH-471AY	CHIP CAP.	470 pF 50V J	
C1209	NCF21HZ-104AY	CHIP C CAP.	0.1 μF 50V Z	
C1210	NCT03CH-471AY	CHIP CAP.	470 pF 50V J	
C1230	NEA11CM-476RP	CHIP AL E CAP.	47 μF 16V M	
C1231	NCB21HK-272AY	CHIP CAP.	2700 pF 50V K	
C1232	NCB21HK-102AY	CHIP CAP.	1000 pF 50V K	
C1233	NCB21HK-103AY	CHIP CAP.	0.01 μF 50V K	
C1234	NEA10JM-336RZ	CHIP AL E CAP.	33 μF 6.3V M	
C1235	NCB21HK-393AY	CHIP CAP.	0.039 μF 50V K	
C1236	QEPA1HM-105M	BP E CAP.	1 μF 50V M	
C1237	NCT03CH-331AY	CHIP CAP.	330 pF 50V J	
C1238	NCT03CH-680AY	CHIP CAP.	68 pF 50V J	
C1239-40	NCT03CH-150AY	CHIP CAP.	15 pF 50V J	
C1241	NCB21HK-103AY	CHIP CAP.	0.01 μF 50V K	
C1242	NEA11CM-476RP	CHIP AL E CAP.	47 μF 16V M	
C1260	NCF21HZ-104AY	CHIP C CAP.	0.1 μF 50V Z	
C1301	NEA11CM-476RP	CHIP AL E CAP.	47 μF 16V M	
C1302	NEA11CM-106RZ	CHIP AL E CAP.	10 μF 16V M	
C1404-10	NEA11CM-476RP	CHIP AL E CAP.	47 μF 16V M	
C1501-02	NCT03CH-180AY	CHIP CAP.	18 pF 50V J	
C1503	NCF21HZ-104AY	CHIP C CAP.	0.1 μF 50V Z	
C1505	NEA11CM-106RZ	CHIP AL E CAP.	10 μF 16V M	
C1601	NCT03CH-221AY	CHIP CAP.	220 pF 50V J	
C1602-04	NCT03CH-101AY	CHIP CAP.	100 pF 50V J	
C1605	NCT03CH-221AY	CHIP CAP.	220 pF 50V J	
C1606	NCB21HK-102AY	CHIP CAP.	1000 pF 50V K	
C1607	NCB21HK-122AY	CHIP CAP.	1200 pF 50V K	
C1608	NCB21HK-222AY	CHIP CAP.	2200 pF 50V K	
C1609	QEN41HM-335	BP E CAP.	3.3 μF 50V M	
C1610	NCT03CH-680AY	CHIP CAP.	68 pF 50V J	
C1611	NCB21HK-152AY	CHIP CAP.	1500 pF 50V K	
C1612	NCT03CH-270AY	CHIP CAP.	27 pF 50V J	

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⚠ Symbol No.	Part No.	Part Name	Description			Local
CAPACITOR						
C1613	NEA11CM-106RZ	CHIP AL E CAP.	10 μF	16V	M	
C1614	NCB21HK-103AY	CHIP CAP.	0.01 μF	50V	K	
C1615	NEA11HM-105RZ	CHIP AL E CAP.	1 μF	50V	M	
C1616	NCB21HK-103AY	CHIP CAP.	0.01 μF	50V	K	
C1617	NCT03CH-101AY	CHIP CAP.	100 pF	50V	J	
C1618	NCF21HZ-104AY	CHIP C CAP.	0.1 μF	50V	Z	
C1619	NCB21HK-103AY	CHIP CAP:	0.01 μF	50V	K	
C1620	NCB21HK-102AY	CHIP CAP.	1000 pF	50V	K	
C1701	QEKB1CM-107M	E CAP.	100 μF	16V	M	
C1703	NEA11CM-476RP	CHIP AL E CAP.	47 μF	16V	M	
C1704	NCT03CH-680AY	CHIP CAP.	68 pF	50V	J	
C1705	NEA11CM-106RZ	CHIP AL E CAP.	10 μF	16V	M	
C1706	NEA10JM-107RP	CHIP AL E CAP.	100 μF	6.3V	M	
C1707	NCB21HK-223AY	CHIP CAP.	0.022 μF	50V	K	
C1708	NCT03CH-8R0AY	CHIP CAP.	8 pF	50V	J	
C1709	NEA11EM-226RP	CHIP AL E CAP.	22 μF	25V	M	
C1710	NCB21HK-103AY	CHIP CAP.	0.01 μF	50V	K	
C1711	NEA11HM-225RZ	CHIP AL E CAP.	2.2 μF	50V	M	
C1712	NCB21HK-333AY	CHIP CAP.	0.033 μF	50V	K	
C1713	NEA11HM-224RZ	CHIP AL E CAP.	0.22 μF	50V	M	
C1714	NCB21HK-103AY	CHIP CAP.	0.01 μF	50V	K	
C1715	NEA11HM-475RP	CHIP AL E CAP.	4.7 μF	50V	M	
C1716	NCT03CH-560AY	CHIP CAP.	56 pF	50V	J	
C1717-18	NCT03CH-221AY	CHIP CAP.	220 pF	50V	J	
C1719-20	QEPA1HM-105M	BP E CAP.	1 μF	50V	M	
C1721	NCT03CH-820AY	CHIP CAP.	82 pF	50V	J	
C1722	NEN11HM-105RZ	CHIP AL BP E CAP	1 μF	50V	M	
C1723	NEA10JM-107RP	CHIP AL E CAP.	100 μF	6.3V	M	
C1724	NCB21HK-102AY	CHIP CAP.	1000 pF	50V	K	
C1725	NCB21HK-472AY	CHIP CAP.	4700 pF	50V	K	
C1726	NCB21HK-152AY	CHIP CAP.	1500 pF	50V	K	
C1727	NCB21HK-223AY	CHIP CAP.	0.022 μF	50V	K	
C1728	NEA11HM-105RZ	CHIP AL E CAP.	1 μF	50V	M	
C1729	NCB21HK-682AY	CHIP CAP.	6800 pF	50V	K	
C1730	NEA11CM-106RZ	CHIP AL E CAP.	10 μF	16V	M	
C1731	NCB21HK-103AY	CHIP CAP.	0.01 μF	50V	K	
C1732	NCT03CH-150AY	CHIP CAP.	15 pF	50V	J	
C1733	NCT03CH-201AY	CHIP CAP.	200 pF	50V	J	
C1734	NCT03CH-100AY	CHIP CAP.	10 pF	50V	J	
C1735	NEA11CM-106RZ	CHIP AL E CAP.	10 μF	16V	M	
C1736	NCB21HK-102AY	CHIP CAP.	1000 pF	50V	K	
C1737	NEA11HM-335RZ	CHIP AL E CAP.	3.3 μF	50V	M	
C1738	NCB21HK-102AY	CHIP CAP.	1000 pF	50V	K	
C1739	NCB21HK-472AY	CHIP CAP.	4700 pF	50V	K	
C1740	NCF21HZ-104AY	CHIP C CAP.	0.1 μF	50V	Z	
C1741	NEA11HM-335RZ	CHIP AL E CAP.	3.3 μF	50V	M	
C1742	NCF21HZ-104AY	CHIP C CAP.	0.1 μF	50V	Z	
C1743	NEA11CM-106RZ	CHIP AL E CAP.	10 μF	16V	M	
C1744	NCT03CH-270AY	CHIP CAP.	27 pF	50V	J	
C1745	NCB21HK-152AY	CHIP CAP.	1500 pF	50V	K	
C1746	NCT03CH-681AY	CHIP CAP.	680 pF	50V	J	
C1801	NCT03CH-101AY	CHIP CAP.	100 pF	50V	J	
C1802	NEA11CM-476RP	CHIP AL E CAP.	47 μF	16V	M	
C1803-04	NCT03CH-151AY	CHIP CAP.	150 pF	50V	J	
C1805-06	NEA11CM-476RP	CHIP AL E CAP.	47 μF	16V	M	
C1807	NCT03CH-151AY	CHIP CAP.	150 pF	50V	J	
C1808	NEA11CM-476RP	CHIP AL E CAP.	47 μF	16V	M	
C1809	NCT03CH-151AY	CHIP CAP.	150 pF	50V	J	
C1811	NCT03CH-151AY	CHIP CAP.	150 pF	50V	J	
C1811-12	NEA11CM-476RP	CHIP AL E CAP.	47 μF	16V	M	
C1901	NEA11CM-476RP	CHIP AL E CAP.	47 μF	16V	M	
C1902-03	NCF21HZ-104AY	CHIP C CAP.	0.1 μF	50V	Z	
C1904	NEA11CM-476RP	CHIP AL E CAP.	47 μF	16V	M	
C1905	NCF21HZ-104AY	CHIP C CAP.	0.1 μF	50V	Z	

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⚠ Symbol No.	Part No.	Part Name	Description			Local
CAPACITOR						
C1906	NEA11CM-476RP	CHIP AL E CAP.	47 μ F	16V	M	
C1907-08	NCF21HZ-104AY	CHIP C CAP.	0.1 μ F	50V	Z	
C1909	NEA11CM-476RP	CHIP AL E CAP.	47 μ F	16V	M	
C1910	NCF21HZ-104AY	CHIP C CAP.	0.1 μ F	50V	Z	
C1911	NCT03CH-101AY	CHIP CAP.	100 p F	50V	J	
C1912	NCB21HK-152AY	CHIP CAP.	1500 p F	50V	K	
TRANSFORMER						
T1230	CELT036-001	VCO TRANSF.				
T1301	CE42077-001	L P F				
T1310	CE42077-001	L P F				
T1320	CE42077-001	L P F				
T1401	CE41783-001	14MHZ LPF				
T1402	CE41784-001	EQ TRANSF.				
T1411	CE41783-001	14MHZ LPF				
T1412	CE41784-001	EQ TRANSF.				
T1421	CE41783-001	14MHZ LPF				
T1422	CE41784-001	EQ TRANSF.				
T1701	CE42078-001	L P F				
T1702	CE41301-001	B.P.F.				
T1901	CE42079-001	OSC COIL				
T1902	CE42080-001	OSC COIL				
COIL						
L1001-03	CE42136-A01Y	CHIP BEADS CORE				
L1004	CELC044-101	COIL	100 μ H			
L1101	CELP054-101Y	CHIP P COIL	100 μ H			
L1140	CELP054-101Y	CHIP P COIL	100 μ H			
L1202	CE42136-A01Y	CHIP BEADS CORE				
L1230	CELP054-101Y	CHIP P COIL	100 μ H			
L1232	CELP054-101Y	CHIP P COIL	100 μ H			
L1301	CELP054-101Y	CHIP P COIL	100 μ H			
L1402	CELP054-101Y	CHIP P COIL	100 μ H			
L1701-03	CE41209-221Y	CHIP P COIL	220 μ H			
L1704	CE41209-5R6Y	CHIP P COIL	5.6 μ H			
L1801-02	CE41209-121Y	CHIP P COIL	120 μ H			
L1901	CE40453-6R8	PEAKING COIL	6.8 μ H			
L1902-03	CE40453-4R7	PEAKING COIL	4.7 μ H			
L1904-06	CE41790-001	FE CORE				
DIODE						
D1101-03	1SS193-W	SI.DIODE				
D1230	1SS193-W	SI.DIODE				
D1231	1SV200-X	CHIP VARI DIODE				
D1501-06	1SS193-W	SI.DIODE				
D1601-02	MA3051-W	ZENER DIODE				
D1603	1SS193-W	SI.DIODE				
D1701	1SS193-W	SI.DIODE				
D1801	1SS193-W	SI.DIODE				
TRANSISTOR						
Q1101-02	2SC2712(Y)-W	CHIP TRANSISTOR				
Q1201	2SC2712(Y)-W	CHIP TRANSISTOR				
Q1202	2SA1162(YG)-W	SI.TRANSISTOR				
Q1230	2SC2778(BC)-W	SI.TRANSISTOR				
Q1231	2SC2712(Y)-W	CHIP TRANSISTOR				
Q1301	2SC2712(Y)-W	CHIP TRANSISTOR				
Q1302	2SA1162(YG)-W	SI.TRANSISTOR				
Q1405-07	2SC2712(Y)-W	CHIP TRANSISTOR				
Q1501-02	2SC2712(Y)-W	CHIP TRANSISTOR				
Q1601-03	2SC2712(Y)-W	CHIP TRANSISTOR				
Q1701	2SC2712(Y)-W	CHIP TRANSISTOR				
Q1702-06	2SA1162(YG)-W	SI.TRANSISTOR				
Q1707-12	2SC2712(Y)-W	CHIP TRANSISTOR				
Q1801-06	2SC2712(Y)-W	CHIP TRANSISTOR				
Q1807-10	2SA1162(YG)-W	SI.TRANSISTOR				
Q1901-05	2SC2712(Y)-W	CHIP TRANSISTOR				

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⚠	Symbol No.	Part No.	Part Name	Description	Local
	IC				
	IC1101-03	CXD1175AM	I.C.(DIGI-MOS)		
	IC1110	JCC5002	I.C.(DIGI-MOS)		
	IC1111-12	MSM514212ZS-34	LINE MEMORY		
	IC1113-14	MC74F86M	I C		
	IC1140	HD49304ANT	I.C.(DIGI-MOS)		
	IC1201	TA78L09F-W	I C		
	IC1202	TA7357P	I.C.(MONO-ANA)		
	IC1203	TC74HC14AF	I.C.		
	IC1230	SC14S66F-W	I.C.(DIGI-MOS)		
	IC1231	UPC4558G-W	I.C.(MONO-ANA)		
	IC1232	TC74HCU04AF	I.C.(DIGI-MOS)		
	IC1401	LA7220M-W	I.C.		
	IC1501	SC412147B	I.C.		
	IC1502	MN1382-Q-X	I.C.		
	IC1503	M6M80041P	I.C.(M)		
	IC1601-03	TC74HC123AF	I.C.(DIGI-MOS)		
	IC1604	TC74HC151AF-W	I.C.		
	IC1605	M52684AFP-W	I.C.(MONO-ANA)		
	IC1606	TC74HC04AF	I.C.		
	IC1701	UPC2405HF	I.C.(MONO-ANA)		
	IC1702	HA11532MP-W	I.C.		
	IC1703	M52684AFP-W	I.C.(MONO-ANA)		
	IC1901	UPC661G	I.C.(MONO-ANA)		
	IC1902	UPD42272AGF	I.C.(DIGI-MOS)		
	OTHERS				
		CM35341-001	D.SHIELD TOP		
		CM35342-001	D.SHEILD FRAME		
		CM35343-A01	D.SHEILD BOTTOM		
		CM35335-A01	PIP SHILED TOP		
		CM35336-001	PIP SHIELD FRAME		
		CM35337-A01	PIP SHIELD BOTTOM		
	DL1110-11	CE42125-025	DELAY LINE		
	EM1050	CE42126-103Y	EMI FILTER		
	EM1051	CE42126-220Y	EMI FILTER		
	EM1052-55	CE42126-101Y	EMI FILTER		
	EM1056-57	CE42126-103Y	EMI FILTER		
	EM1058-60	CE42126-470Y	EMI FILTER		
	EM1061	CE42126-103Y	EMI FILTER		
	EM1062-64	CE42126-472Y	EMI FILTER		
	EM1065-67	CE42126-103Y	EMI FILTER		
	EM1074-75	CE42126-472Y	EMI FILTER		
	EM1076-77	CE42126-103Y	EMI FILTER		
	EM1078-80	CE42126-220Y	EMI FILTER		
	EM1081-82	CE42126-472Y	EMI FILTER		
	EM1083	CE42126-101Y	EMI FILTER		
	EM1901-04	CE42126-222Y	EMI FILTER		
	EM1905	CE42126-221Y	EMI FILTER		
	EM1906-07	CE42126-222Y	EMI FILTER		
	EM1908-11	CE42126-220Y	EMI FILTER		
	EM1912-15	CE42126-222Y	EMI FILTER		
	EM1916-18	CE42126-221Y	EMI FILTER		
	EM1919	CE42126-222Y	EMI FILTER		
⚠	MD001	EZ-X001A-IB2	ANALOG INPUT MODU	LE PWB ASSY	
⚠	MD002	EZ-X001A-IB2	ANALOG INPUT MODU	LE PWB ASSY	
⚠	MD003	EZ-X001A-IB2	ANALOG INPUT MODU	LE PWB ASSY	
⚠	MD004	EZ-Y001A-IB1	LPF&EQ MODULE PWB	ASSY	
⚠	MD005	EZ-Y001A-IB1	LPF&EQ MODULE PWB	ASSY	
⚠	MD006	EZ-Y001A-IB1	LPF&EQ MODULE PWB	ASSY	
	X1501	CE41216-001	CRYSTAL		
	X1601	CSB503F17	CER.RESONATOR		
	X1701	CE41651-001	CRYSTAL		
	X1702	CSB503F2	CER.RESONATOR		
	X1703	CSB500F9	CER.RESONATOR		

11. LOGCAL COMB PWB ASS'Y (HZ-4201A)

⚠ Symbol No.	Part No.	Part Name	Description			Local
VARIABLE RESISTOR						
R4121	QVPE604-302H	V R	3kΩ B PHASE1			
R4124	QVPE604-102H	V R	1kΩ B GAIN1			
R4132	QVPE604-102H	V R	1kΩ B Y.LEVEL			
R4216	QVPE604-202H	V R	2kΩ B PHASE2			
R4219	QVPE604-102H	V R	1kΩ B GAIN2			
R4313	QVPE604-102H	V R	1kΩ B COMB GAIN			
R4318	QVPE604-501H	V R	500 Ω B COMB PHASE			
R4405	QVPE604-202H	V R	2kΩ B DIRECT GAIN			
R4418	QVPE604-202H	V R	2kΩ B 2H DL GAIN			
RESISTOR						
R4615	NRVA02D-5601NY	CHIP MF R	5.6kΩ		±5%	
CAPACITOR						
C4001	QEN51CM-476	BP E CAP.	47 μF	16V	M	
C4002-03	NCB21HK-103AY	CHIP CAP.	0.01 μF	50V	K	
C4004	QEKB1CM-476M	E CAP.	47 μF	16V	M	
C4005	NCB21HK-103AY	CHIP CAP.	0.01 μF	50V	K	
C4006	NCT03CH-7R0AY	CHIP CAP.	7 pF	50V	J	
C4007	NCB21HK-103AY	CHIP CAP.	0.01 μF	50V	K	
C4009	NCB21HK-103AY	CHIP CAP.	0.01 μF	50V	K	
C4011	NCB21HK-103AY	CHIP CAP.	0.01 μF	50V	K	
C4102	NCT03CH-560AY	CHIP CAP.	56 pF	50V	J	
C4104	QEP51HM-224GM	BP E CAP.	0.22 μF	50V	M	
C4105-06	QEKB1CM-107M	E CAP.	100 μF	16V	M	
C4107-09	NCB21HK-103AY	CHIP CAP.	0.01 μF	50V	K	
C4110	QEKB1CM-107M	E CAP.	100 μF	16V	M	
C4111	QEP51HM-224GM	BP E CAP.	0.22 μF	50V	M	
C4112	NCB21HK-103AY	CHIP CAP.	0.01 μF	50V	K	
C4113	QEKB1HM-335GM	E CAP.	3.3 μF	50V	M	
C4114	QEKB1HM-105GM	E CAP.	1 μF	50V	M	
C4115	QEKB1CM-107M	E CAP.	100 μF	16V	M	
C4116	NCB21HK-103AY	CHIP CAP.	0.01 μF	50V	K	
C4117	QEKB1HM-105GM	E CAP.	1 μF	50V	M	
C4118	QEKB1HM-475GM	E CAP.	4.7 μF	50V	M	
C4119	QEKB1HM-335GM	E CAP.	3.3 μF	50V	M	
C4120	NCB21HK-103AY	CHIP CAP.	0.01 μF	50V	K	
C4121	NCT04UJ-560AY	CHIP CAP.	56 pF	50V	J	
C4122	NCB21HK-103AY	CHIP CAP.	0.01 μF	50V	K	
C4123	QEKB1CM-476M	E CAP.	47 μF	16V	M	
C4124	NCB21HK-103AY	CHIP CAP.	0.01 μF	50V	K	
C4125	QEKB1CM-106GM	E CAP.	10 μF	16V	M	
C4126	NCT03CH-560AY	CHIP CAP.	56 pF	50V	J	
C4127	NCB21HK-103AY	CHIP CAP.	0.01 μF	50V	K	
C4128	NCT03CH-471AY	CHIP CAP.	470 pF	50V	J	
C4201	NCT03CH-100AY	CHIP CAP.	10 pF	50V	J	
C4202	QEPB1HM-105GM	BP E CAP.	1 μF	50V	M	
C4203	NCB21HK-103AY	CHIP CAP.	0.01 μF	50V	K	
C4204	QEKB1HM-105GM	E CAP.	1 μF	50V	M	
C4205	QEKB1CM-107M	E CAP.	100 μF	16V	M	
C4206-07	NCB21HK-103AY	CHIP CAP.	0.01 μF	50V	K	
C4208	QEKB1CM-107M	E CAP.	100 μF	16V	M	
C4209-11	NCB21HK-103AY	CHIP CAP.	0.01 μF	50V	K	
C4212	NCT04UJ-560AY	CHIP CAP.	56 pF	50V	J	
C4213	NCB21HK-103AY	CHIP CAP.	0.01 μF	50V	K	
C4214	QEKB1CM-476M	E CAP.	47 μF	16V	M	
C4215-16	NCB21HK-103AY	CHIP CAP.	0.01 μF	50V	K	
C4301	QEKB1CM-106GM	E CAP.	10 μF	16V	M	
C4302	NCB21HK-103AY	CHIP CAP.	0.01 μF	50V	K	
C4303	NCT03CH-560AY	CHIP CAP.	56 pF	50V	J	
C4305	NCT03CH-560AY	CHIP CAP.	56 pF	50V	J	
C4306	NCT04UJ-560AY	CHIP CAP.	56 pF	50V	J	
C4307	NCB21HK-103AY	CHIP CAP.	0.01 μF	50V	K	
C4308	NCT03CH-8R0AY	CHIP CAP.	8 pF	50V	J	

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⚠ Symbol No.	Part No.	Part Name	Description	Local
CAPACITOR				
C4309	NCB21HK-103AY	CHIP CAP.	0.01 μF 50V K	
C4310	NCT03CH-680AY	CHIP CAP.	68 pF 50V J	
C4311	NCB21HK-103AY	CHIP CAP.	0.01 μF 50V K	
C4313	NCB21HK-103AY	CHIP CAP.	0.01 μF 50V K	
C4314	NCT03CH-560AY	CHIP CAP.	56 pF 50V J	
C4315	NCB21HK-103AY	CHIP CAP.	0.01 μF 50V K	
C4316-17	NCT03CH-120AY	CHIP CAP.	12 pF 50V J	
C4401-04	QEKB1CM-476M	E CAP.	47 μF 16V M	
C4405	QEKB1HM-105GM	E CAP.	1 μF 50V M	
C4406	QEKB1CM-106GM	E CAP.	10 μF 16V M	
C4407	QEKB1HM-105GM	E CAP.	1 μF 50V M	
C4408	NCS21HJ-331AY	CHIP C CAP.	330 pF 50V J	
C4410	QEKB1CM-107M	E CAP.	100 μF 16V M	
C4412	NCT03CH-2R0AY	CHIP CAP.	2 pF 50V J	
C4414	NCS21HJ-331AY	CHIP C CAP.	330 pF 50V J	
C4601	NCB21HK-103AY	CHIP CAP.	0.01 μF 50V K	
C4602	NCT03CH-100AY	CHIP CAP.	10 pF 50V J	
C4603-04	NCB21HK-103AY	CHIP CAP.	0.01 μF 50V K	
C4605	QEKB1HM-475GM	E CAP.	4.7 μF 50V M	
C4606	NCT03CH-100AY	CHIP CAP.	10 pF 50V J	
C4607	NCB21HK-103AY	CHIP CAP.	0.01 μF 50V K	
C4608	QEKB1CM-107M	E CAP.	100 μF 16V M	
C4609	NCB21HK-223AY	CHIP CAP.	0.022 μF 50V K	
C4610	NCB21HK-103AY	CHIP CAP.	0.01 μF 50V K	
C4801	QEKB1CM-107M	E CAP.	100 μF 16V M	
C4802	NCB21HK-103AY	CHIP CAP.	0.01 μF 50V K	
C4803	QEKB1CM-107M	E CAP.	100 μF 16V M	
C4804	NCB21HK-103AY	CHIP CAP.	0.01 μF 50V K	
C4805	QEKB1CM-107M	E CAP.	100 μF 16V M	
C4806	NCB21HK-103AY	CHIP CAP.	0.01 μF 50V K	
C4807	QEKB1CM-107M	E CAP.	100 μF 16V M	
C4808	NCB21HK-103AY	CHIP CAP.	0.01 μF 50V K	
C4809	QEKB1CM-107M	E CAP.	100 μF 16V M	
C4810	NCB21HK-103AY	CHIP CAP.	0.01 μF 50V K	
C4811	QEKB1CM-107M	E CAP.	100 μF 16V M	
C4812	NCB21HK-103AY	CHIP CAP.	0.01 μF 50V K	
C4815	QEKB1CM-107M	E CAP.	100 μF 16V M	
C4816	NCB21HK-103AY	CHIP CAP.	0.01 μF 50V K	
C4817	QEKB1CM-107M	E CAP.	100 μF 16V M	
C4818	NCB21HK-103AY	CHIP CAP.	0.01 μF 50V K	
C4819	QEKB1CM-107M	E CAP.	100 μF 16V M	
C4820	NCB21HK-103AY	CHIP CAP.	0.01 μF 50V K	
TRANSFORMER				
T4001	CE41814-001	LOWPASS FILTER		
T4002	CE41817-001	B.PASS TRANSF.		
T4101	CE41885-001	TRAP TRANSF.		
T4102	CE41814-001	LOWPASS FILTER		
T4103	CE41817-001	B.PASS TRANSF.		
T4201	CE41965-001	LOWPASS FILTER		
T4202	CE41817-001	B.PASS TRANSF.		
T4301-02	CE41909-001	DELAY LINE		
T4303	CE41301-001	B.P.F.		
T4401	CE42012-001	DELAY LINE		
T4402	CE42007-001	LOWPASS FILTER		
COIL				
L4101	CELP026-5R6	PEAKING COIL	5.6 μH	
L4201	CELP026-5R6	PEAKING COIL	5.6 μH	
L4301	CELP026-5R6	PEAKING COIL	5.6 μH	
L4302	CELP026-330	PEAKING COIL	33 μH	
DIODE				
D4101	MA153-W	DIODE		
D4102-03	MA3091(M)-W	ZENER DIODE		

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⚠ Symbol No.	Part No.	Part Name	Description	Local
DIODE				
D4401	1SS133	SI.DIODE		
D4801	MA4091(M)	ZENER DIODE		
D4802	MA4075(M)	ZENER DIODE		
D4803-04	MA4051(M)	ZENER DIODE		
TRANSISTOR				
Q4001	2SC2712(YG)-W	SI.TRANSISTOR		
Q4002	2SA1162(YG)-W	SI.TRANSISTOR		
Q4003-05	2SC2712(YG)-W	SI.TRANSISTOR		
Q4101-04	2SC2712(YG)-W	SI.TRANSISTOR		
Q4105-06	2SA1162(YG)-W	SI.TRANSISTOR		
Q4107-12	2SC2712(YG)-W	SI.TRANSISTOR		
Q4202-09	2SC2712(YG)-W	SI.TRANSISTOR		
Q4301-05	2SC2712(YG)-W	SI.TRANSISTOR		
Q4307-17	2SC2712(YG)-W	SI.TRANSISTOR		
Q4401	2SA1162(YG)-W	SI.TRANSISTOR		
Q4402-04	2SC2712(YG)-W	SI.TRANSISTOR		
Q4405	2SA1162(YG)-W	SI.TRANSISTOR		
Q4406-12	2SC2712(YG)-W	SI.TRANSISTOR		
Q4601-02	2SC2712(YG)-W	SI.TRANSISTOR		
Q4604-06	2SC2712(YG)-W	SI.TRANSISTOR		
IC				
IC4101	TL8707P	I.C.(MONO-ANA)		
IC4201	CXL5502M	I.C.(MONO-ANA)		
IC4301	CXA1413L	I.C.(MONO-ANA)		
IC4601	TA7374P	I.C.		
OTHERS				
	CM35085-001	SHIELD TOP		
	CM35086-A01	SHIELD BOTTOM		
CF4601	SFE10.7MS2-C	CERAMIC FILTER		
CF4602	EFC-S3R58MS4	CERAMIC FILTER		

12. SURROUND PWB ASS'Y (HZ-6201A)

⚠ Symbol No.	Part No.	Part Name	Description			Local
RESISTOR						
R6601	QRD123J-680SX	C R	68 Ω	1/2W	J	
R6911	QRB085J-474	NETW.R	470k Ω	1/8W	J	
R6912-13	QRB085J-103	NETW.R	10k Ω	1/8W	J	
CAPACITOR						
C6121-23	QEN61CM-106Z	BP E CAP.	10 μ F	16V	M	
C6154	NCB11HK-104AY	CHIP CAP.	0.1 μ F	50V	K	
C6201-02	QEN61CM-106Z	BP E CAP.	10 μ F	16V	M	
C6203-04	QFLC1HJ-332MZ	M CAP.	3300 p F	50V	J	
C6207-08	NCS21HJ-121AY	CHIP C CAP.	120 p F	50V	J	
C6212-13	QFP31HG-332SZ	PP CAP.	3300 p F	50V	G	
C6301-02	NCT03CH-220AY	CHIP CAP.	22 p F	50V	J	
C6303	NCB11HK-104AY	CHIP CAP.	0.1 μ F	50V	K	
C6305	NCB11HK-104AY	CHIP CAP.	0.1 μ F	50V	K	
C6307	NCT03CH-101AY	CHIP CAP.	100 p F	50V	J	
C6311	QEN61EM-226Z	BP E CAP.	22 μ F	25V	M	
C6314	NCB11HK-104AY	CHIP CAP.	0.1 μ F	50V	K	
C6315	QFV71HJ-104MZ	TF CAP.	0.1 μ F	50V	J	
C6402	NCT03CH-680AY	CHIP CAP.	68 p F	50V	J	
C6405	NCT03CH-680AY	CHIP CAP.	68 p F	50V	J	
C6407	NCT03CH-680AY	CHIP CAP.	68 p F	50V	J	
C6412	NCT03CH-101AY	CHIP CAP.	100 p F	50V	J	
C6414	QEN61CM-106Z	BP E CAP.	10 μ F	16V	M	
C6418	NCT03CH-101AY	CHIP CAP.	100 p F	50V	J	
C6420	QEN61CM-106Z	BP E CAP.	10 μ F	16V	M	
C6422	QFV71HJ-154MZ	TF CAP.	0.15 μ F	50V	J	
C6423	NCT03CH-101AY	CHIP CAP.	100 p F	50V	J	
C6424	QEN61CM-106Z	BP E CAP.	10 μ F	16V	M	
C6502	QFLC1HJ-272MZ	M CAP.	2700 p F	50V	J	
C6503	NCS21HJ-391AY	CHIP C CAP.	390 p F	50V	J	
C6504	QFLC1HJ-682MZ	M CAP.	6800 p F	50V	J	
C6505	QEN61CM-106Z	BP E CAP.	10 μ F	16V	M	
C6507	QFLC1HJ-272MZ	M CAP.	2700 p F	50V	J	
C6508	NCS21HJ-391AY	CHIP C CAP.	390 p F	50V	J	
C6509	QFLC1HJ-682MZ	M CAP.	6800 p F	50V	J	
C6514-15	QFLC1HJ-273MZ	M CAP.	0.027 μ F	50V	J	
C6552	QFLC1HJ-272MZ	M CAP.	2700 p F	50V	J	
C6553	NCS21HJ-391AY	CHIP C CAP.	390 p F	50V	J	
C6554	QFLC1HJ-682MZ	M CAP.	6800 p F	50V	J	
C6555	QEN61CM-106Z	BP E CAP.	10 μ F	16V	M	
C6557	QFLC1HJ-272MZ	M CAP.	2700 p F	50V	J	
C6558	NCS21HJ-391AY	CHIP C CAP.	390 p F	50V	J	
C6559	QFLC1HJ-682MZ	M CAP.	6800 p F	50V	J	
C6564-65	QFLC1HJ-273MZ	M CAP.	0.027 μ F	50V	J	
C6602	NCB11HK-104AY	CHIP CAP.	0.1 μ F	50V	K	
C6605	NCB11HK-104AY	CHIP CAP.	0.1 μ F	50V	K	
C6607	NCB11HK-104AY	CHIP CAP.	0.1 μ F	50V	K	
C6609-10	NCB11HK-104AY	CHIP CAP.	0.1 μ F	50V	K	
C6901	NCB11HK-104AY	CHIP CAP.	0.1 μ F	50V	K	
C6903	NCF11HZ-102AY	CHIP C CAP.	1000 p F	50V	Z	
TRANSFORMER						
T6201-02	CELT014-001	LOWPASS FILTER				
DIODE						
D6151-54	1SS133-T2	SI.DIODE				
D6155-56	RD7.5ES(B2)-T2	ZENER DIODE				
D6201-04	1SS133-T2	SI.DIODE				
D6301-06	1SS133-T2	SI.DIODE				
TRANSISTOR						
Q6121-25	2SC2412K(QR)-W	SI.TRANSISTOR				
Q6301	2SK209(YG)-W	F.E.T.				
Q6303	2SC2412K(QR)-W	SI.TRANSISTOR				
Q6304	2SA1037K(QR)-W	SI.TRANSISTOR				
Q6305	2SK209(YG)-W	F.E.T.				
Q6451	2SC2412K(QR)-W	SI.TRANSISTOR				
Q6501-02	2SC2412K(QR)-W	SI.TRANSISTOR				

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⚠ Symbol No.	Part No.	Part Name	Description	Local
TRANSISTOR				
Q6503	2SA1037K(QR)-W	SI.TRANSISTOR		
Q6551-52	2SC2412K(QR)-W	SI.TRANSISTOR		
IC				
IC6101	XRA15218F-W	I.C.		
IC6121	MC14053BF-W	I.C.		
IC6181	M51523AL	I.C.(M)		
IC6201	XRA15218F-W	I.C.		
IC6301	YM7306C	I.C.(DIGI-OTHER)		
IC6302	MS51464-12NC	I.C.(D-RAM)		
IC6303	XRA15218F-W	I.C.		
IC6304	M5238FP-W	I.C.(M)		
IC6305	XRA15218F-W	I.C.		
IC6401-02	M5238FP-W	I.C.(M)		
IC6403-04	XRA15218F-W	I.C.		
IC6451	MC14053BF-W	I.C.		
IC6501	M5238FP-W	I.C.(M)		
IC6502	XRA15218F-W	I.C.		
IC6551	M5238FP-W	I.C.(M)		
IC6552	XRA15218F-W	I.C.		
IC6601	TA78L005AP-Y	I.C.(H)		
IC6901	SC403978B	I.C.(MICRO-COMP)		
IC6902	MN1280-Q	I.C.(DIGI-MOS)		
OTHERS				
	CM35304-001	A.SHIELD TOP		
	CM35305-001	A.SHIELD BOTTOM		
CF6301	CSA8.46MT	CER.RESONATOR		
CF6901	CST4.00MGW	CER.RESONATOR		
F6601	CE42110-223Z	NOISE FILTER		

13. MTS PWB ASS'Y (SGY6001A(H1))

⚠ Symbol No.	Part No.	Part Name	Description	Local
VARIABLE RESISTOR				
R6626	QVPE604-103H	V R	10kΩ B MOD.F 300Hz	
R6627	QVPE604-502H	V R	5kΩ B MOD.F 3kHz	
R6628	QVPC609-303H	V R	30kΩ B FILTER	
R6629	QVPC609-503H	V R	50kΩ B VCO	
RESISTOR				
R6603	QRV141F-4302AY	MF R	43kΩ 1/4W F	
⚠ R6608	QRV141F-6201AY	MF R	6.2kΩ 1/4W F	
⚠ R6609	QRV141F-3901AY	MF R	3.9kΩ 1/4W F	
R6610-11	QRV141F-4702AY	MF R	47kΩ 1/4W F	
CAPACITOR				
C6601	QEKC1HM-475GMZ	E CAP.	4.7μF 50V M	
C6602	QFLC1HK-123MZ	M CAP.	0.012μF 50V K	
C6603	QFLC1HK-562MZ	M CAP.	5600pF 50V K	
C6604	QEP61HM-474GMZ	BP E CAP.	0.47μF 50V M	
C6605	QEKC1CM-476MZ	E CAP.	47μF 16V M	
C6607	QFLC1HK-272MZ	M CAP.	2700pF 50V K	
C6608	QEKC1HM-475GMZ	E CAP.	4.7μF 50V M	
C6609	QEE61CK-106BZ	TAN.CAP.	10μF 16V K	
C6610	QEE61CK-335BZ	TAN.CAP.	3.3μF 16V K	
C6611	QEKC1HM-105GMZ	E CAP.	1μF 50V M	
C6612-13	QEKC1HM-475GMZ	E CAP.	4.7μF 50V M	
C6614	QFLC1HK-473MZ	M CAP.	0.047μF 50V K	
C6615-18	QEKC1HM-475GMZ	E CAP.	4.7μF 50V M	
TRANSISTOR				
Q6601-03	2SC2785(JH)-T	SI.TRANSISTOR		
IC				
IC6601	CXA1124AS	I.C.		

PRINTED WIRING MODULE BOARD PARTS LIST

1. D FOCUS MODULE PWB ASS'Y (PU-D001A-H1)

⚠ Symbol No.	Part No.	Part Name	Description	Local
RESISTOR				
R2653	QRZ0056-562Z	COMP.R	5.6kΩ 1/2W K	
R2654	QRZ0056-103Z	COMP.R	10kΩ 1/2W K	
R2676-77	QRD149J-152S	C R	1.5kΩ 1/4W J	
CAPACITOR				
C2601	QEN61HM-335Z	BP E CAP.	3.3μF 50V M	
C2603	QFV71HJ-104MZ	TF CAP.	0.1μF 50V J	
C2607	QFV71HJ-104MZ	TF CAP.	0.1μF 50V J	
C2609	QFV71HJ-224MZ	TF CAP.	0.22μF 50V J	
C2612	QFZ0081-1002S	M P P CAP.	1000pF	
C2615	QFZ0081-1001S	M P P CAP.	1000pF	
C2616-17	QFV71HJ-124MZ	TF CAP.	0.12μF 50V J	
DIODE				
D2603	1SS133-T2	SI.DIODE		
D2605-06	1SS133-T2	SI.DIODE		
D2607	ES1F	SI.DIODE		
D2608-09	1SS133-T2	SI.DIODE		
D2610	ES1F	SI.DIODE		
TRANSISTOR				
Q2601-03	2SC1740(QR)-T	SI.TRANSISTOR		
Q2604	2SA933(QR)-T	SI.TRANSISTOR		
Q2605	2SC1740(QR)-T	SI.TRANSISTOR		
Q2606-07	2SC4256	SI.TRANSISTOR		
Q2608	2SA933(QR)-T	SI.TRANSISTOR		
Q2609	2SC1740(QR)-T	SI.TRANSISTOR		
Q2610-11	2SC4256	SI.TRANSISTOR		
Q2612	2SA933(QR)-T	SI.TRANSISTOR		
Q2613-14	2SC1740(QR)-T	SI.TRANSISTOR		
Q2615	2SA933(QR)-T	SI.TRANSISTOR		
Q2616-17	2SC1740(QR)-T	SI.TRANSISTOR		
OTHERS				
SG2601	CE41680-302	ARESTOR		

PACKING VIEW PARTS LIST

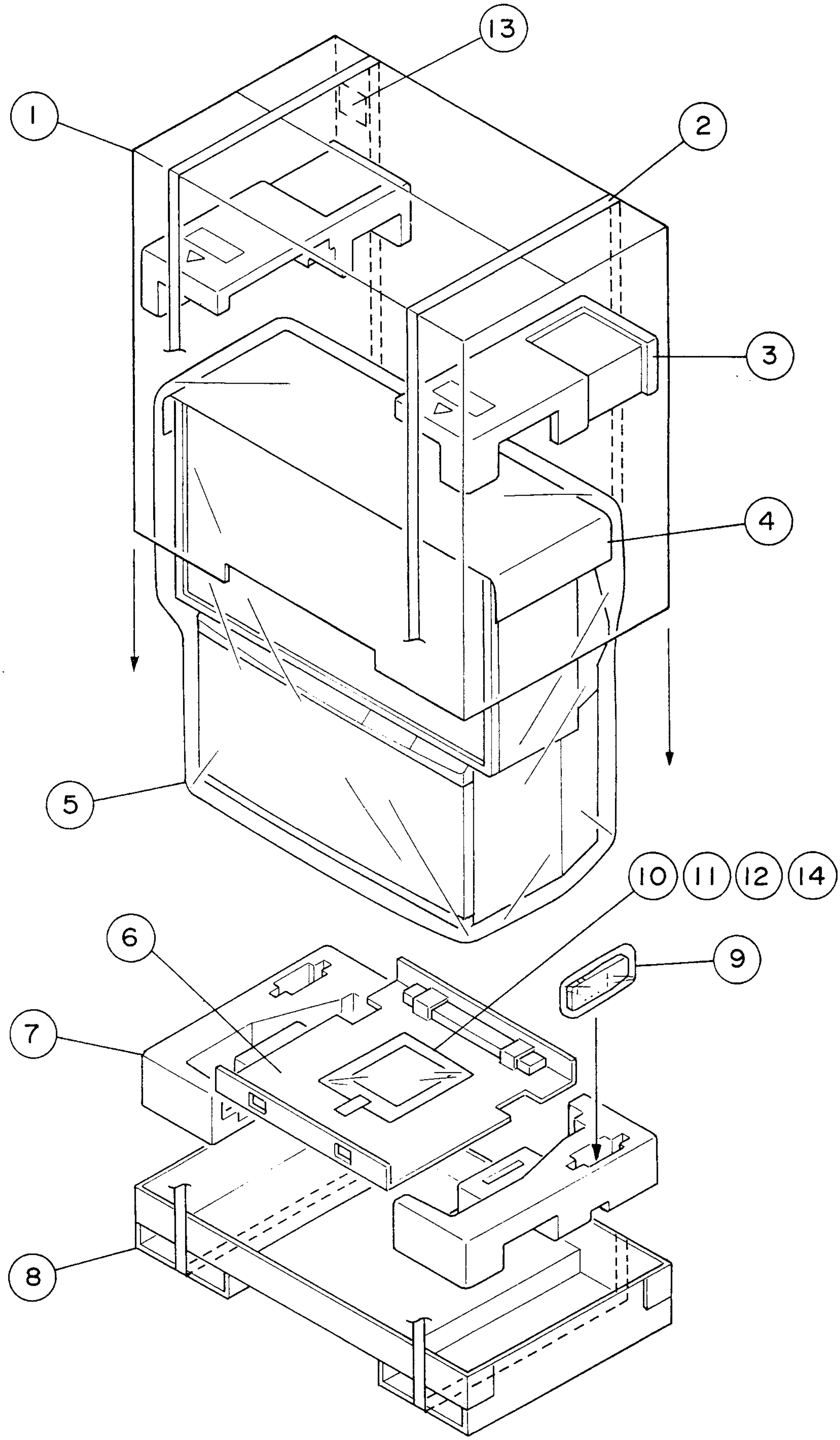
⚠	Ref.No.	Part No.	Part Name	Description	Local
	1	CP11267-001-A	PACKING CASE		*
	2	CP30071-00F	BAND	×2	*
	3	CP30808-00A-A	TOP CUSHION		*
	4	CP30055-006-A	TOP COVER	×2	*
	5	CP30056-A05-A	POLY BAG		*
	6	CP30806-001-A	BOTTOM SHEET		*
	7	CP30809-00A-A	BOTTOM CUSHION		*
	8	CP30807-001-A	BOTTOM CASE		*
	9	RM-C980-01-KH	REMOCON		*
	10	CM30751-010	POLY BAG		
	11	NV55BX4U-IBA-A	INST BOOK		*
	12	BT-51006-1	REGISTRATION CARD		
	13	CM31900-00A-A	REC KEEPING CARD		*
⚠	14	CEAC008-150	PLUG CABLE		

CEAC012-150J1 Compu Cable

BATTERY COVER

UR52EC1001B

PACKING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NV-55BX4 US STANDARD CIRCUIT DIAGRAM

■NOTE ON USING CIRCUIT DIAGRAMS

1.SAFETY

The components identified by the ⚠ symbol and shading are critical for safety. For continued safety replace safety critical components only with manufactures recommended parts.

2.SPECIFIED VOLTAGE AND WAVEFORM VALUES

The voltage and waveform values have been measured under the following conditions.

(1)Input signal	:Color bar signal
(2)Setting positions of each knob/button and variable resistor	:Original setting position when shipped
(3)Internal resistance of tester	:DC 20kΩ/V
(4)Oscilloscope sweeping time	:H ⇒20µS/div :V ⇒5mS/div :Others ⇒ Sweeping time is specified
(5)Voltage values	:All DC voltage values

* Since the voltage values of signal circuit vary to some extent according to adjustments, use them as reference values.

3.INDICATION OF PARTS SYMBOL[EXAMPLE]

- In the PW board :R1209→R209

4.INDICATIONS ON THE CIRCUIT DIAGRAM

(1)Resistors

- Resistance value

No unit	:[Ω]
K	:[KΩ]
M	:[MΩ]

- Rated allowable power

No indication	:1/6[W]
Others	:As specified

- Type

No indication	:Carbon resistor
OMR	:Oxide metal film resistor
MFR	:Metal film resistor
MPR	:Metal plate resistor
UNFR	:Uninflammable resistor
FR	:Fusible resistor

* Composition resistor 1/2 [W] is specified as 1/2S or Comp.

(2)Capacitors

- Capacitance value

1or higher	:[pF]
less than 1	:[µF]

- Withstand voltage

No indication	:DC50[V]
Others	:DC withstand voltage[V]
AC indicated	:AC withstand voltage[V]

* Electrolytic Capacitors

47/50[Example]:Capacitance value[µF]/withstand voltage[V]

- Type

No indication	:Ceramic capacitor
MY	:Mylar capacitor
MM	:Metalized mylar capacitor
PP	:Polypropylene capacitor
MPP	:Metalized polypropylene capacitor
MF	:Metalized film capacitor
TF	:Thin film capacitor
BP	:Bipolar electrolytic capacitor
TAN	:Tantalum capacitor

(3)Coils

No unit	:[µH]
Others	:As specified

(4)Power Supply

══════	:B1(130V)
▬▬▬▬	:B2(12V)
▬▭▬▭	:9V
▭▭▭▭	:5V

* Respective voltage values are indicated.

(5)Test Point

⊙	: Test point
○	: Only test point display

(6)Connecting method

□	: Connector
○	: Wrapping or soldering
→≻— →≻—	: Receptacle

(7)Ground symbol

⊥	: LIVE side ground
⫫	: NEUTRAL side ground
⏚	: EARTH ground
▽	: DIGITAL ground

5.NOTE FOR REPAIRING SERVICE

This model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE (primary : ⊥) side GND and the NEUTRAL (secondary : ⫫) side GND. Therefore, care must be taken for the following points.

(1) Do not touch the LIVE side GND or the LIVE side GND and the NEUTRAL side GND simultaneously. If the above caution is not respected, an electric shock may be caused. Therefore, make sure that the power cord is surely removed from the receptacle when, for example, the chassis is pulled out.

(2) Do not short between the LIVE side GND and NEUTRAL side GND or never measure with a measuring apparatus (oscilloscope, etc.) the LIVE side GND and NEUTRAL side GND at the same time. If the above precaution is not respected, a fuse or any parts will be broken.

◇ Since the circuit diagram is a standard one, the circuit and circuit constants may be subject to change for improvement without any notice.

Apr. 1993 No.50774

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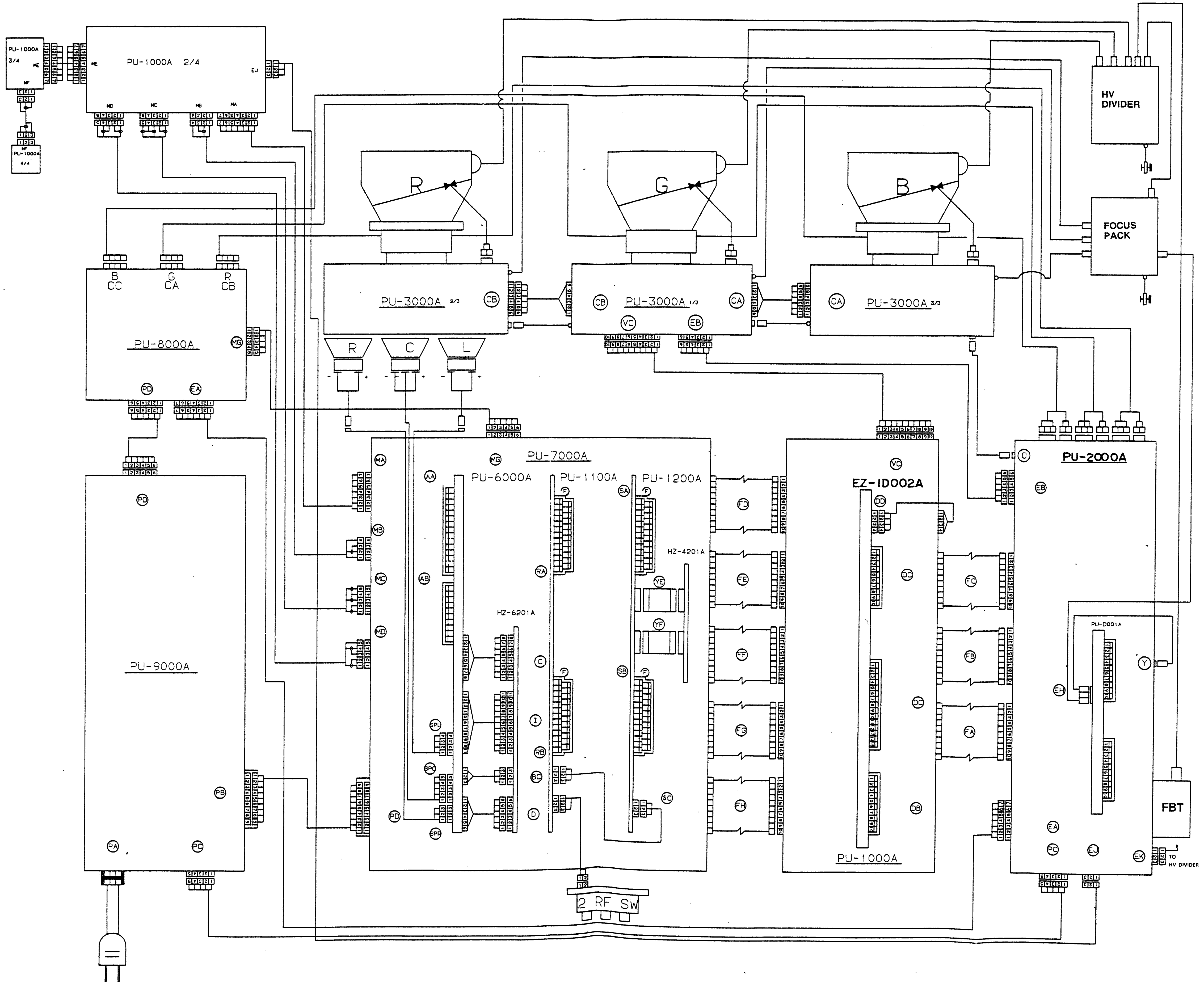
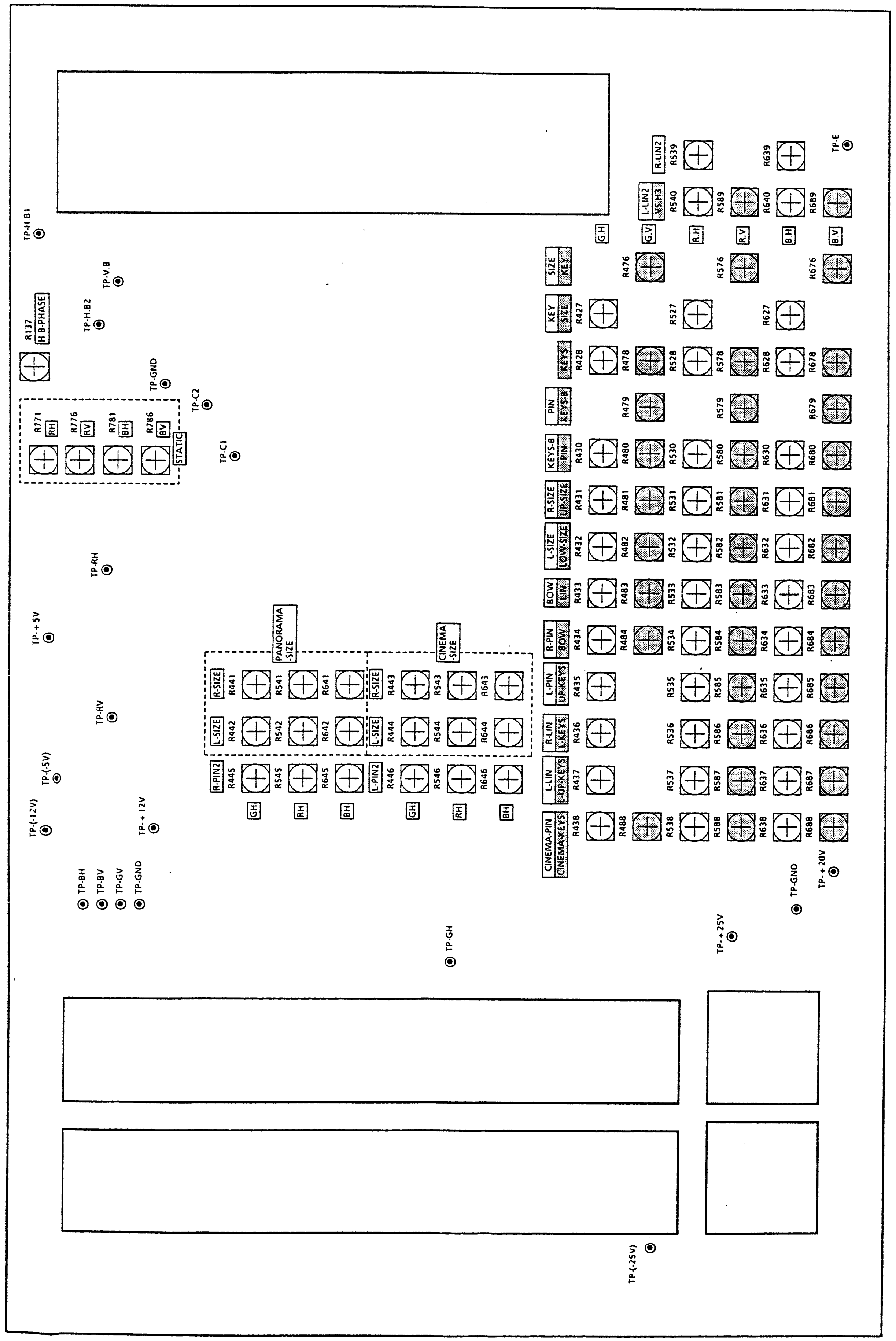
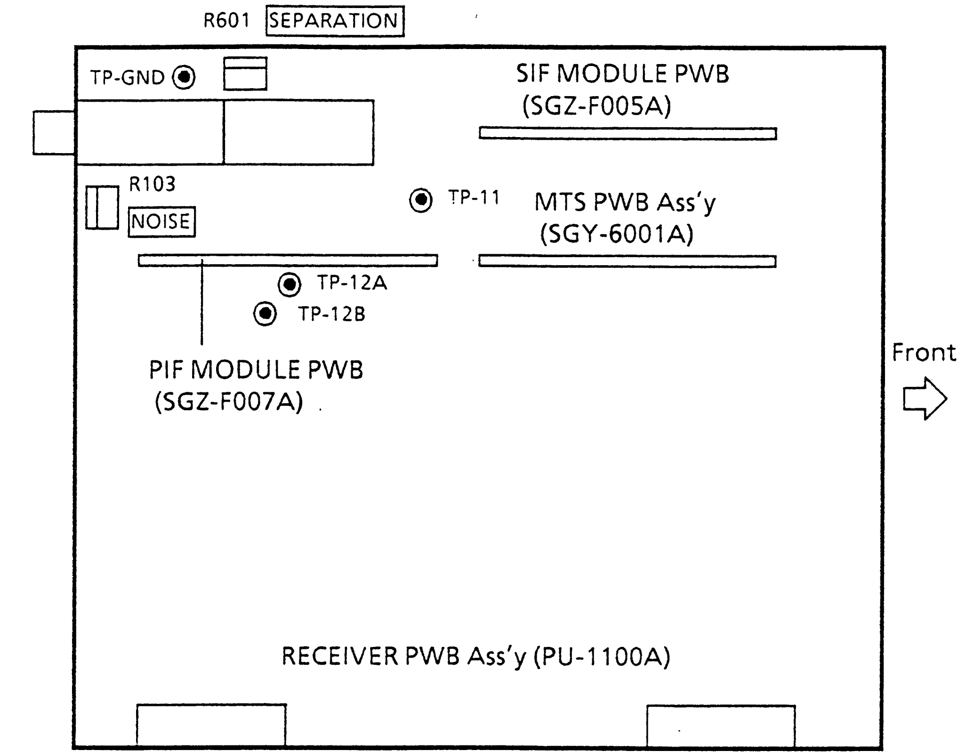
WIRING DIAGRAM

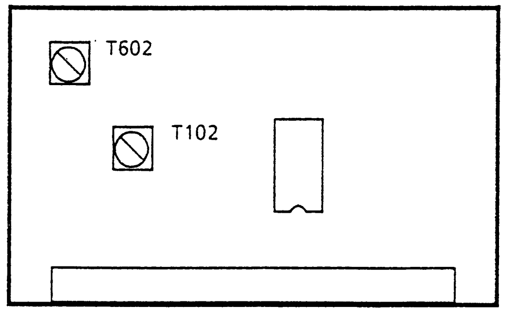

PU-1000A 3/4
ME
MF
PU-1000A 4/4
PU-1000A 2/4
EJ
MD
MC
MB
MA
R
G
B
HV DIVIDER
FOCUS PACK
B CC
G CA
R CB
PU-8000A
MG
PD
EA
PU-3000A 2/3
CB
PU-3000A 1/3
CA
VC
EB
PU-3000A 3/3
R
C
L
PU-9000A
PB
PA
PC
PU-7000A
MA
MB
MC
MD
MG
PU-6000A
PU-1100A
PU-1200A
AA
AB
HZ-6201A
HZ-4201A
RA
SA
YE
YF
C
I
RB
BC
D
SB
SC
SPL
SPC
SPR
PD
F
FD
FE
FF
FG
FH
EZ-1D002A
VC
DD
DC
DC
DB
PU-1000A
FC
FB
FA
PU-2000A
O
EB
PU-D001A
Y
EH
EA
PC
EJ
EK
TO HV DIVIDER
FBT
2 RF SW

MAIN PARTS LOCATION AND ALIGNMENTS LOCATION

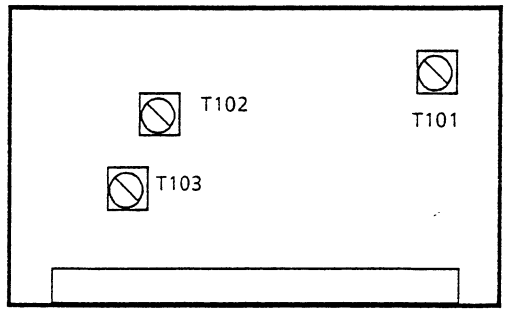

TP-H.B1
TP-V.B
TP-H.B2
R137 H.B-PHASE
TP-GND
TP-C2
TP-C1
R771 RH
R776 RV
R781 BH
R786 BV
STATIC
TP-RH
TP-+5V
TP-RV
TP-(-5V)
TP-(-12V)
TP-+12V
TP-BH
TP-BV
TP-GV
TP-GND
PANORAMA -SIZE
CINEMA -SIZE
R-SIZE R441 R541 R641
L-SIZE R442 R542 R642
R-SIZE R443 R543 R643
L-SIZE R444 R544 R644
R-PIN2 R445 R545 R645
L-PIN2 R446 R546 R646
GH RH BH GH RH BH
R-LIN2 R539 R639 TP-E
L-LIN2 V5.H3 R540 R589 R640 R689
G.H G.V R.H R.V B.H B.V
SIZE KEY R476 R576 R676
KEY SIZE R427 R527 R627
KEYS R428 R478 R528 R578 R628 R678
PIN KEYS-B R479 R579 R679
KEYS-B PIN R430 R480 R530 R580 R630 R680
R-SIZE UP-SIZE R431 R481 R531 R581 R631 R681
L-SIZE LOW-SIZE R432 R482 R532 R582 R632 R682
BOW LIN R433 R483 R533 R583 R633 R683
R-PIN BOW R434 R484 R534 R584 R634 R684
L-PIN UP-KEYS R435 R535 R585 R635 R685
R-LIN L-KEYS R436 R536 R586 R636 R686
L-LIN UP-KEYS R437 R537 R587 R637 R687
CINEMA-PIN CINEMA-KEYS R438 R488 R538 R588 R638 R688
TP-GND
TP-+20V
TP-+25V
TP-GH
TP-(-25V)

CONVER PWB Ass'y (PU-8000A)

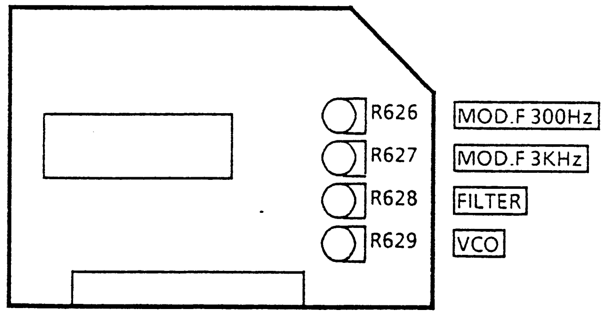

R601 SEPARATION
TP-GND
SIF MODULE PWB (SGZ-F005A)
R103
NOISE
TP-11
MTS PWB Ass'y (SGY-6001A)
TP-12A
TP-12B
PIF MODULE PWB (SGZ-F007A)
Front
RECEIVER PWB Ass'y (PU-1100A)



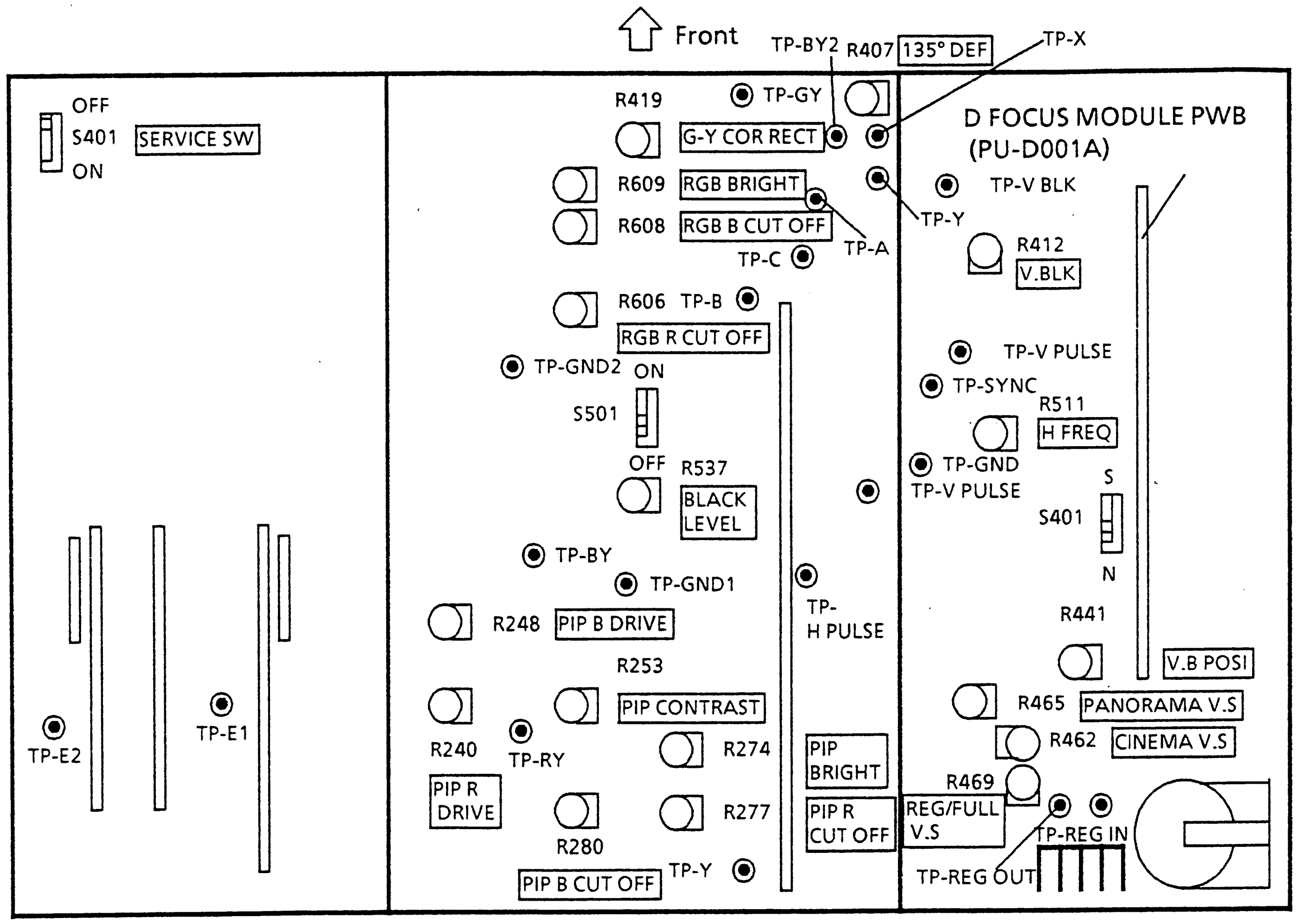
SIF MODULE PWB (SGZ-F005A)


T102
T101
T103

PIF MODULE PWB (SGZ-F007A)


R626 MOD.F 300Hz
R627 MOD.F 3KHz
R628 FILTER
R629 VCO

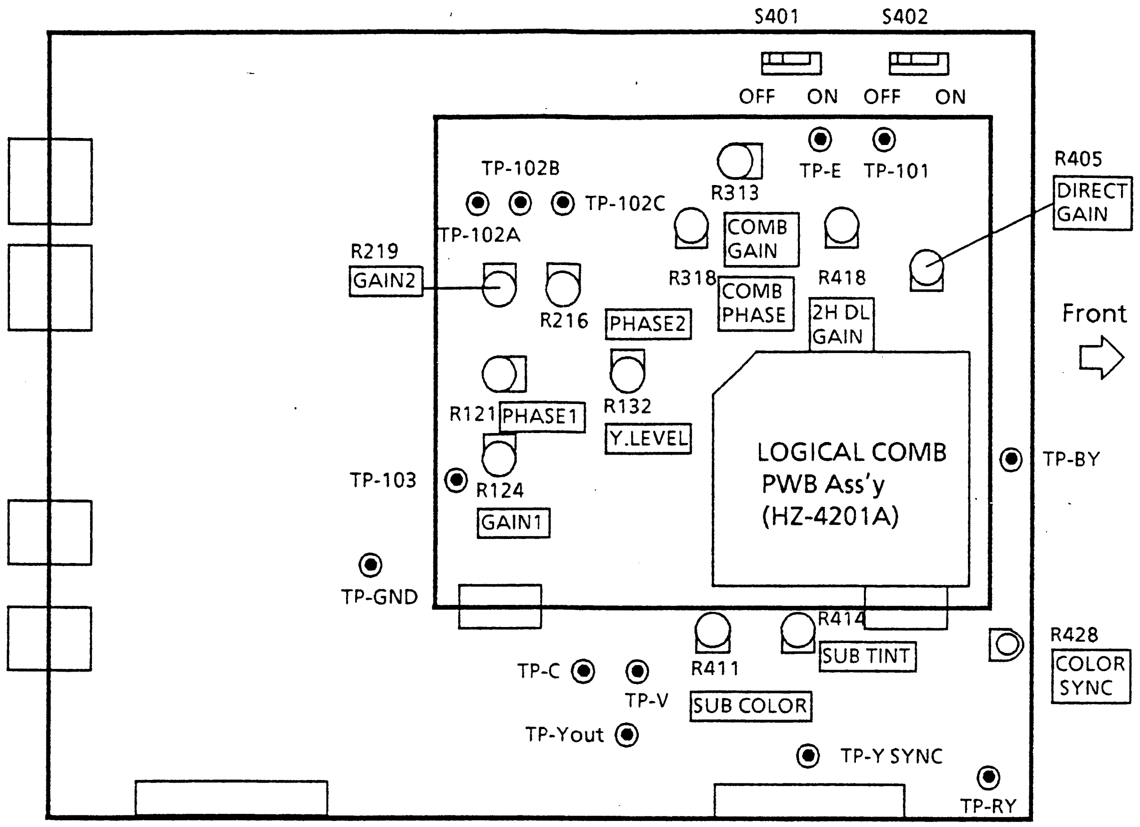
MTS PWB Ass'y (SGY-6001A)


Front
OFF
S401
ON
SERVICE SW
TP-E2
TP-E1
TP-BY2
R407
135° DEF
TP-X
R419
TP-GY
G-Y COR RECT
R609
RGB BRIGHT
R608
RGB B CUT OFF
TP-A
TP-C
TP-Y
R606
TP-B
RGB R CUT OFF
TP-GND2
ON
S501
OFF
R537
BLACK LEVEL
TP-BY
TP-GND1
R248
PIP B DRIVE
R253
PIP CONTRAST
TP-H PULSE
R240
TP-RY
R274
PIP BRIGHT
PIP R DRIVE
R277
R280
PIP R CUT OFF
PIP B CUT OFF
TP-Y
D FOCUS MODULE PWB
(PU-D001A)
TP-V BLK
R412
V.BLK
TP-V PULSE
TP-SYNC
R511
H FREQ
TP-GND
TP-V PULSE
S
S401
N
R441
V.B POSI
R465
PANORAMA V.S
R462
CINEMA V.S
R469
REG/FULL V.S
TP-REG IN
TP-REG OUT

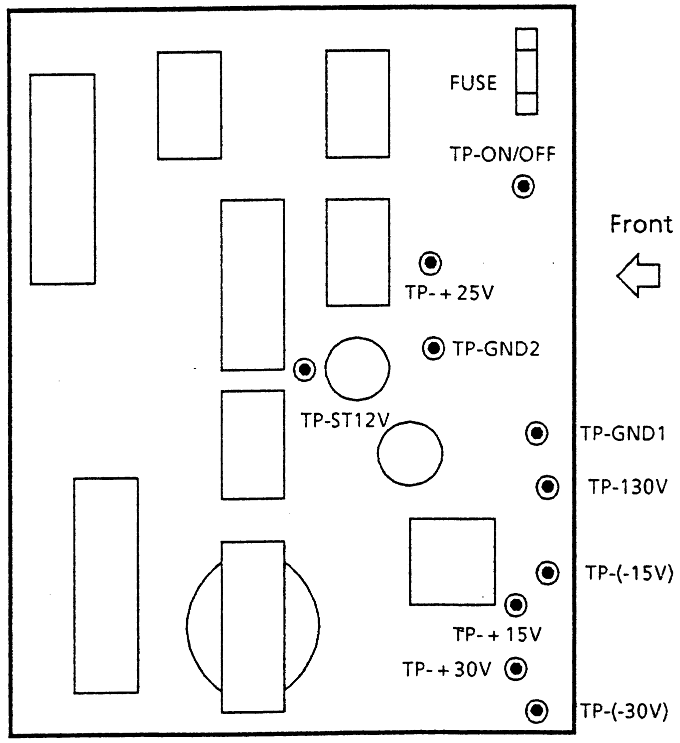
MICON PWB Ass'y (PU-7000A)

VIDEO PWB Ass'y (PU-1000A)

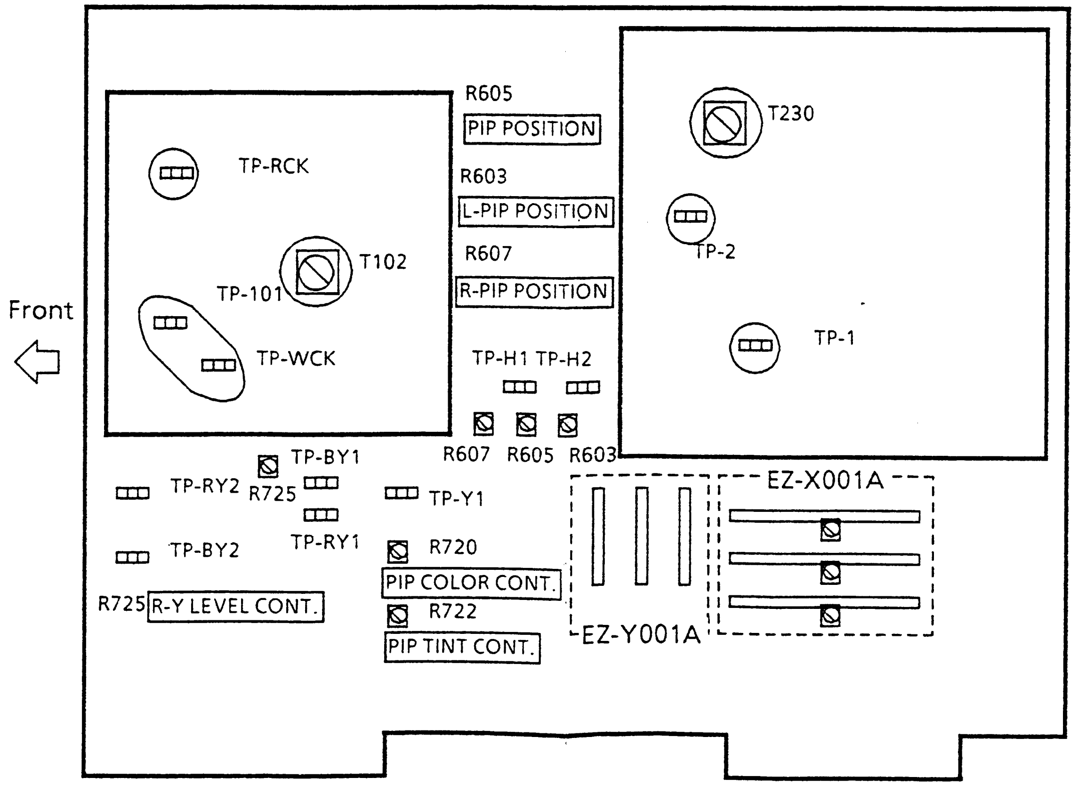
DEF PWB Ass'y (PU-2000A)


S401
S402
OFF
ON
OFF
ON
TP-E
TP-101
TP-102B
R313
TP-102C
TP-102A
COMB GAIN
R405
DIRECT GAIN
R219
GAIN2
R318
COMB PHASE
R418
2H DL GAIN
R216
PHASE2
Front
R121
PHASE1
R132
Y.LEVEL
LOGICAL COMB PWB Ass'y (HZ-4201A)
TP-103
R124
GAIN1
TP-BY
TP-GND
R414
SUB TINT
R428
COLOR SYNC
TP-C
TP-V
R411
SUB COLOR
TP-Yout
TP-Y SYNC
TP-RY

S INPUT PWB Ass'y (PU-1200A)

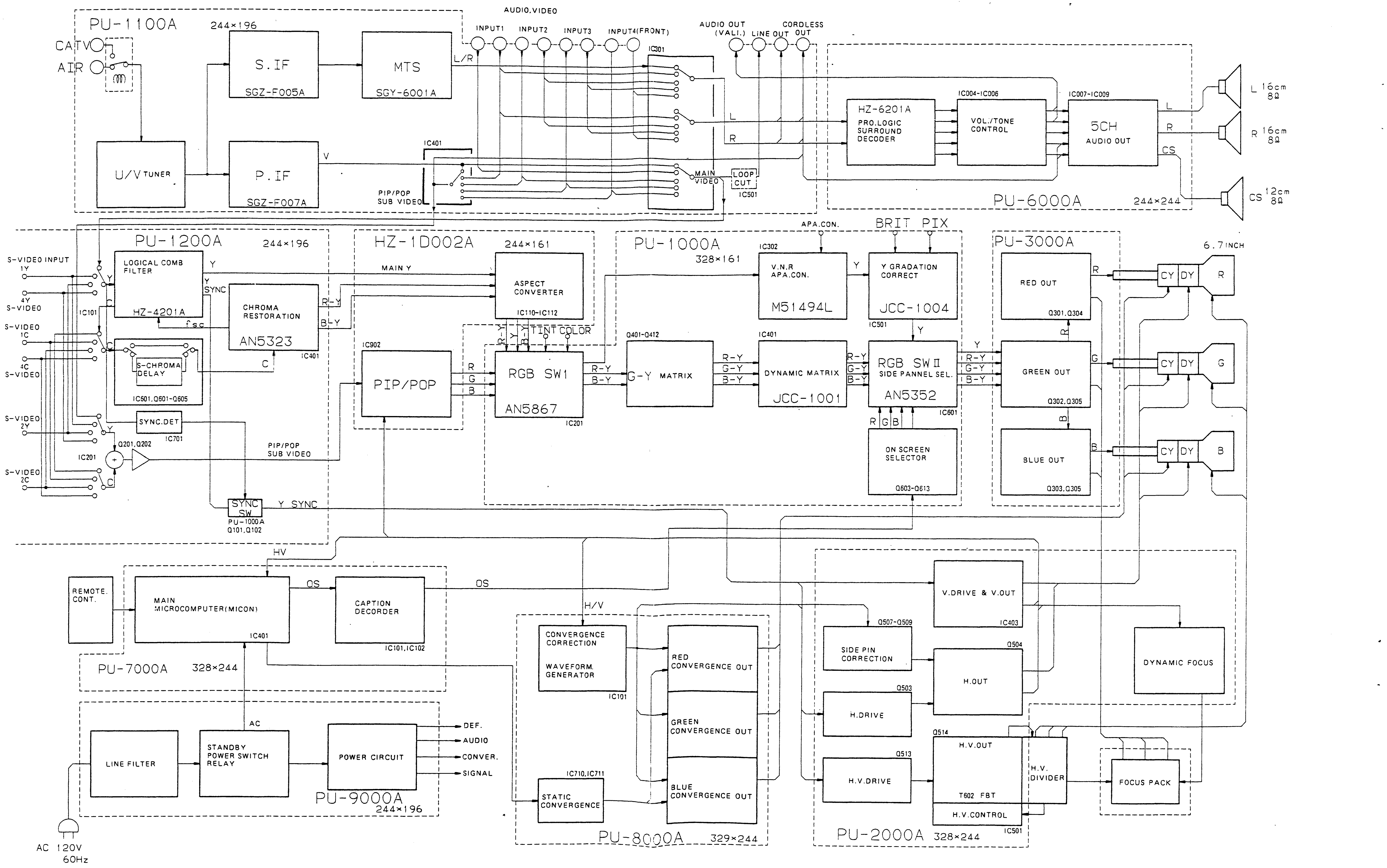

FUSE
TP-ON/OFF
Front
TP-+25V
TP-GND2
TP-ST12V
TP-GND1
TP-130V
TP-(-15V)
TP-+15V
TP-+30V
TP-(-30V)

POWER PWB Ass'y (PU-9000A)

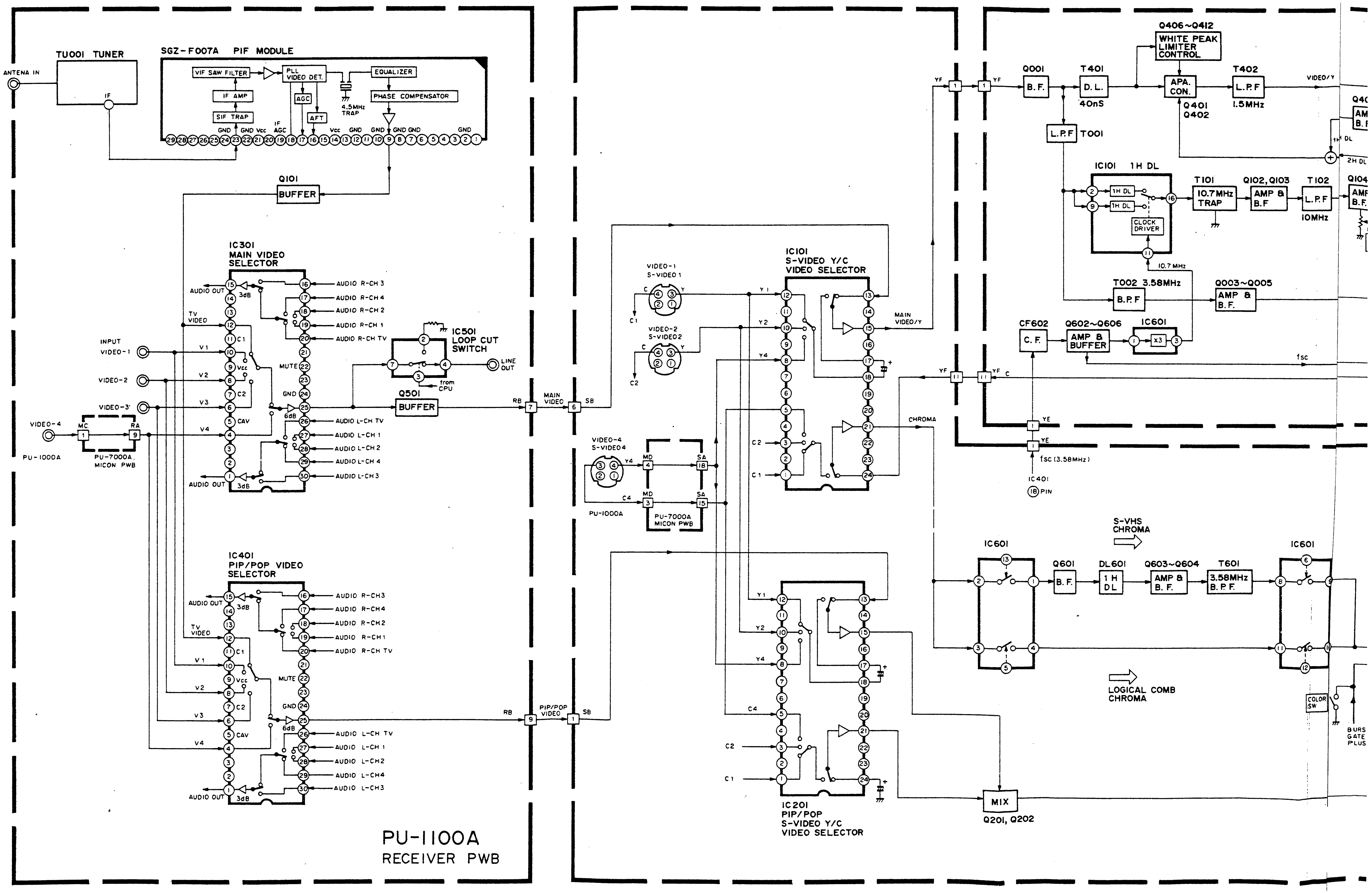

R605
PIP POSITION
T230
TP-RCK
R603
L-PIP POSITION
TP-2
T102
R607
R-PIP POSITION
TP-101
Front
TP-WCK
TP-1
TP-H1 TP-H2
R607 R605 R603
TP-BY1
TP-RY2
R725
TP-Y1
EZ-X001A
TP-BY2
TP-RY1
R720
PIP COLOR CONT.
R725
R-Y LEVEL CONT.
R722
EZ-Y001A
PIP TINT CONT.

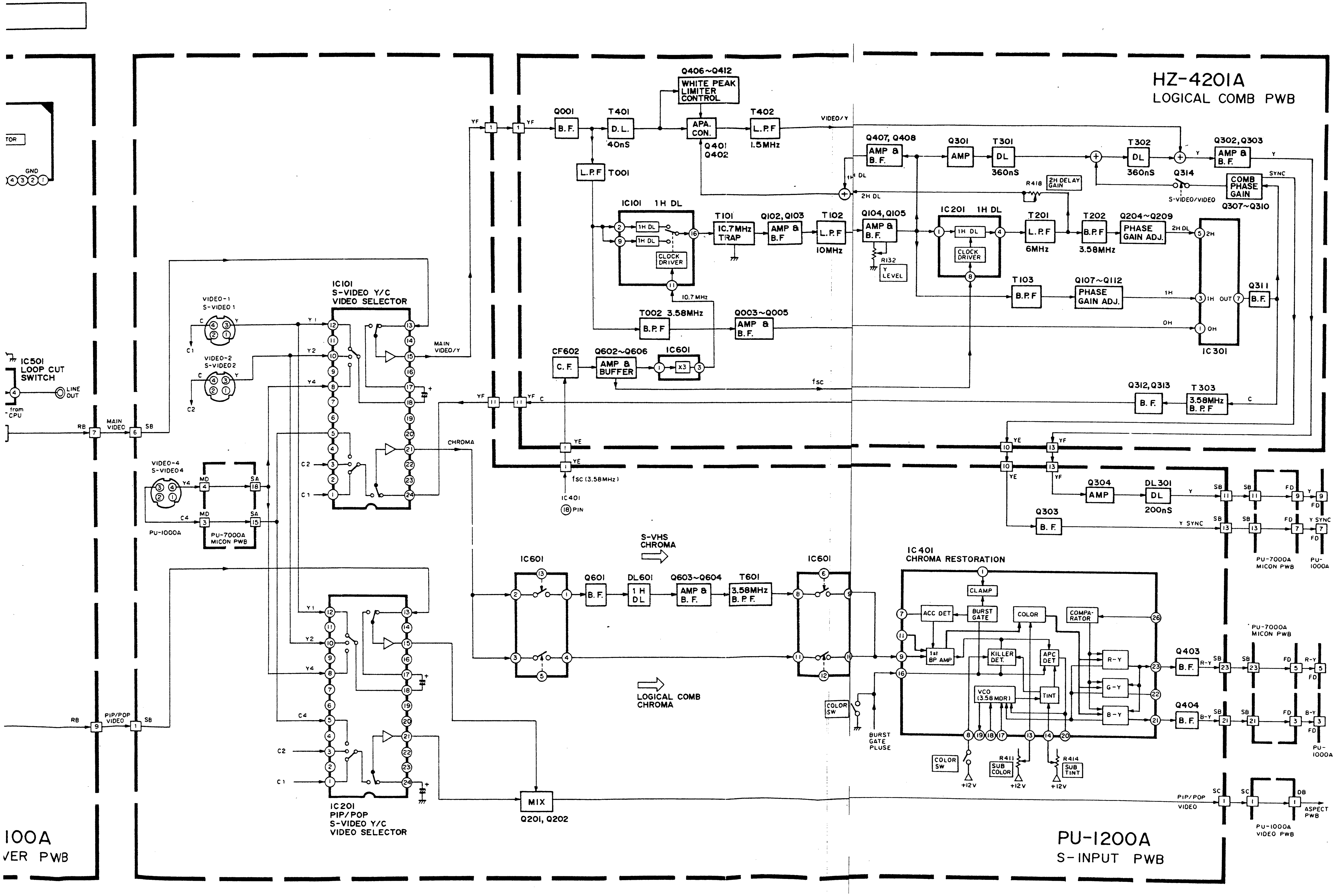
ASPECT PWB ASS'Y (EZ-1D001A)

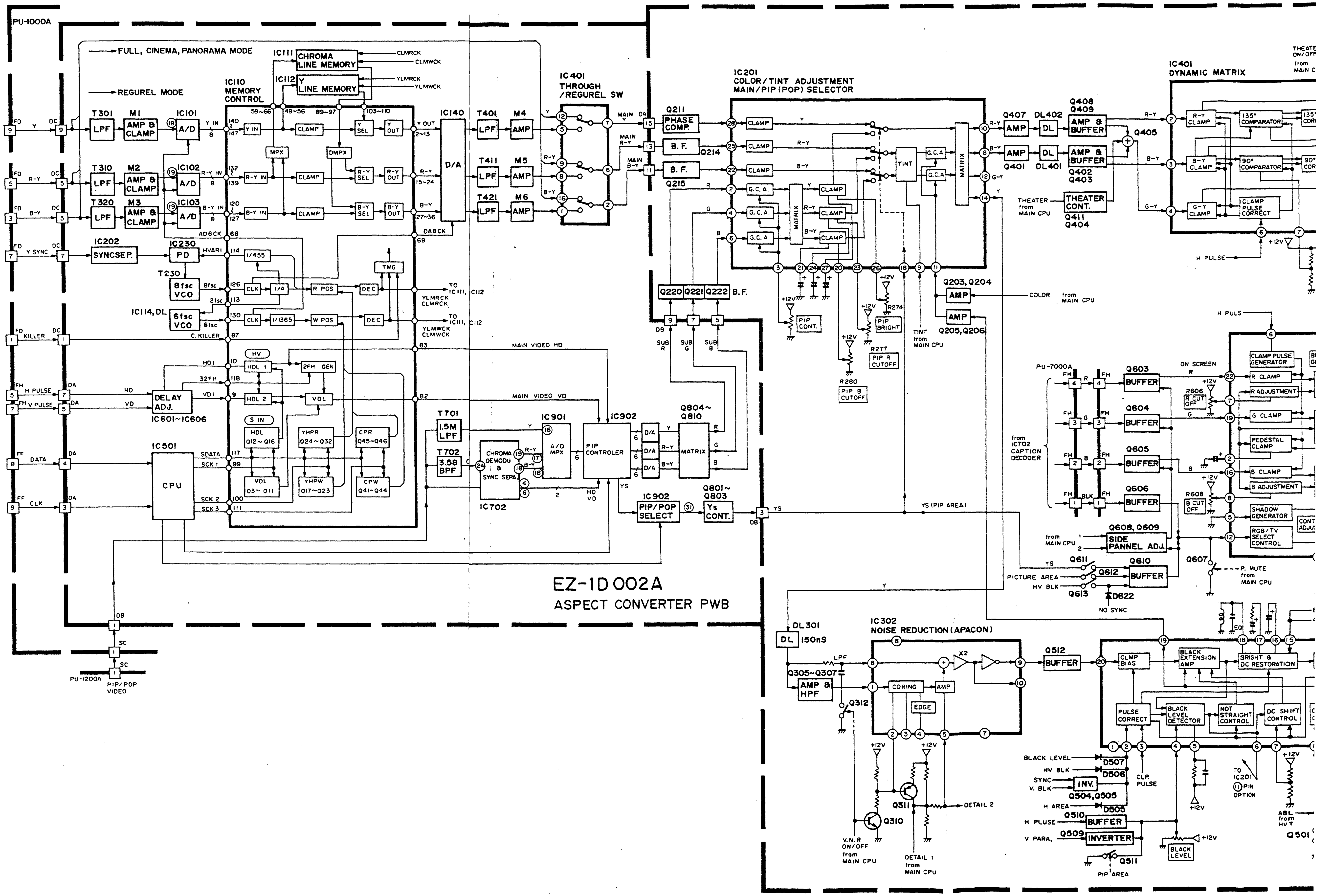
SIMPLICITY BLOCK DIAGRAM

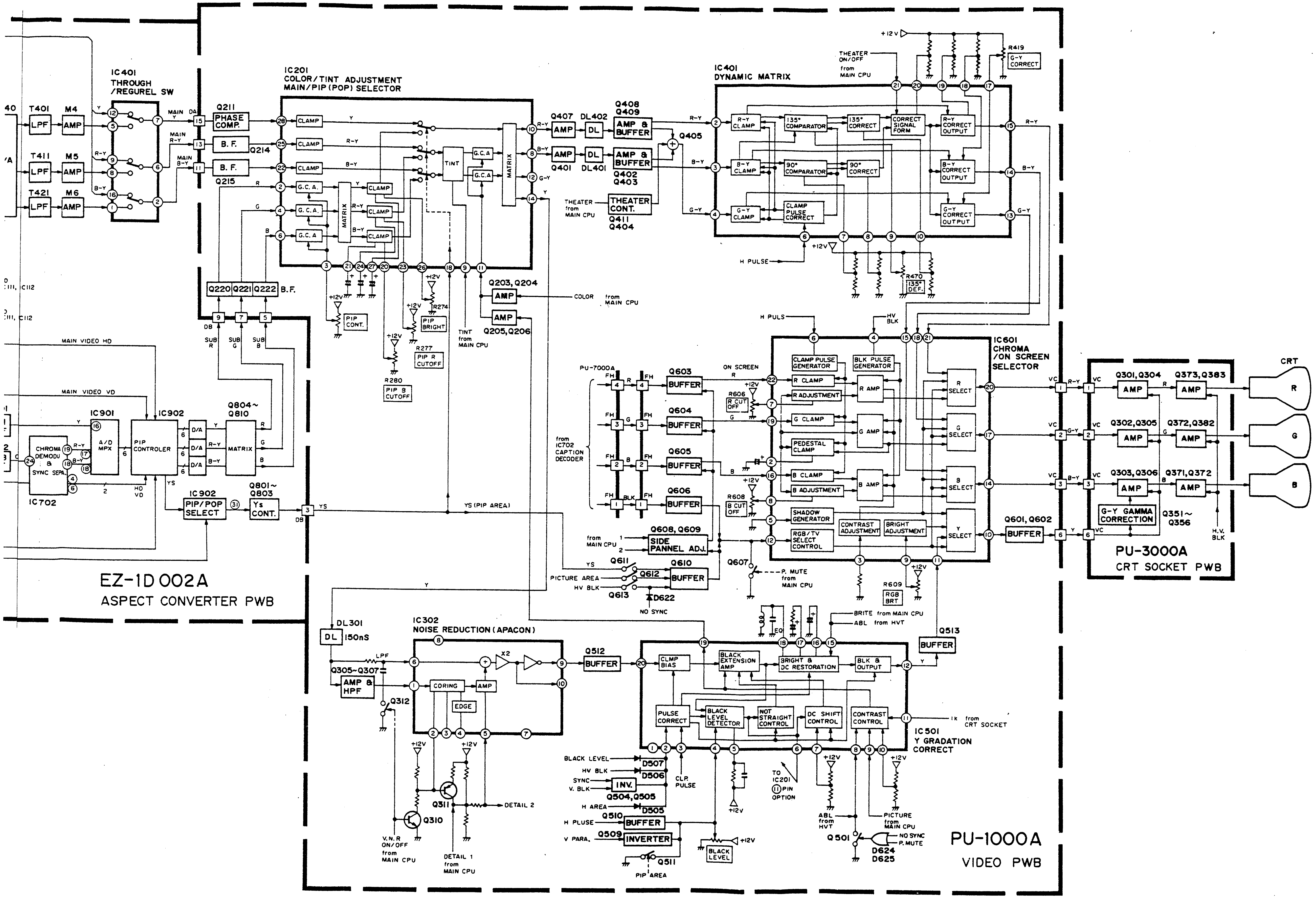

PU-1100A 244×196
CATV
AIR
S.IF
SGZ-F005A
MTS
SGY-6001A
L/R
U/V TUNER
P.IF
SGZ-F007A
V
IC401
PIP/POP SUB VIDEO
AUDIO,VIDEO
INPUT1
INPUT2
INPUT3
INPUT4(FRONT)
IC301
L
R
MAIN VIDEO
LOOP CUT
IC501
AUDIO OUT (VALI.)
LINE OUT
CORDLESS OUT
HZ-6201A
PRO.LOGIC SURROUND DECODER
IC004-IC006
VOL./TONE CONTROL
IC007-IC009
5CH AUDIO OUT
L
R
CS
PU-6000A 244×244
L 16cm 8Ω
R 16cm 8Ω
CS 12cm 8Ω
PU-1200A 244×196
S-VIDEO INPUT 1Y
4Y S-VIDEO
S-VIDEO 1C
4C S-VIDEO
S-VIDEO 2Y
S-VIDEO 2C
LOGICAL COMB FILTER
HZ-4201A
IC101
Y
Y SYNC
C
CHROMA RESTORATION
AN5323
IC401
R-Y
B-Y
fsc
S-CHROMA DELAY
IC601,Q601-Q605
SYNC.DET
IC701
Q201,Q202
IC201
PIP/POP SUB VIDEO
SYNC SW
PU-1000A Q101,Q102
Y SYNC
HZ-1D002A 244×161
MAIN Y
ASPECT CONVERTER
IC110-IC112
R-Y
Y
B-Y
TINT COLOR
IC902
PIP/POP
R
G
B
RGB SW1
AN5867
IC201
PU-1000A 328×161
Q401-Q412
G-Y MATRIX
IC302
V.N.R APA.CON.
M51494L
APA.CON.
BRIT PIX
Y GRADATION CORRECT
JCC-1004
IC501
IC401
DYNAMIC MATRIX
JCC-1001
RGB SW Ⅱ SIDE PANNEL SEL.
AN5352
IC601
ON SCREEN SELECTOR
Q603-Q613
PU-3000A
RED OUT
Q301,Q304
GREEN OUT
Q302,Q305
BLUE OUT
Q303,Q305
6.7 INCH
CY DY R
CY DY G
CY DY B
HV
REMOTE. CONT.
MAIN MICROCOMPUTER(MICON)
IC401
OS
CAPTION DECORDER
IC101,IC102
PU-7000A 328×244
AC
LINE FILTER
STANDBY POWER SWITCH RELAY
POWER CIRCUIT
DEF.
AUDIO
CONVER.
SIGNAL
PU-9000A 244×196
AC 120V 60Hz
H/V
CONVERGENCE CORRECTION WAVEFORM. GENERATOR
IC101
RED CONVERGENCE OUT
GREEN CONVERGENCE OUT
BLUE CONVERGENCE OUT
IC710,IC711
STATIC CONVERGENCE
PU-8000A 329×244
V.DRIVE & V.OUT
IC403
Q507-Q509
SIDE PIN CORRECTION
Q504
H.OUT
Q503
H.DRIVE
Q514
H.V.OUT
Q513
H.V.DRIVE
T602 FBT
H.V.CONTROL
IC501
H.V. DIVIDER
DYNAMIC FOCUS
FOCUS PACK
PU-2000A 328×244

DETAILED BLOCK DIAGRAM (VIDEO)

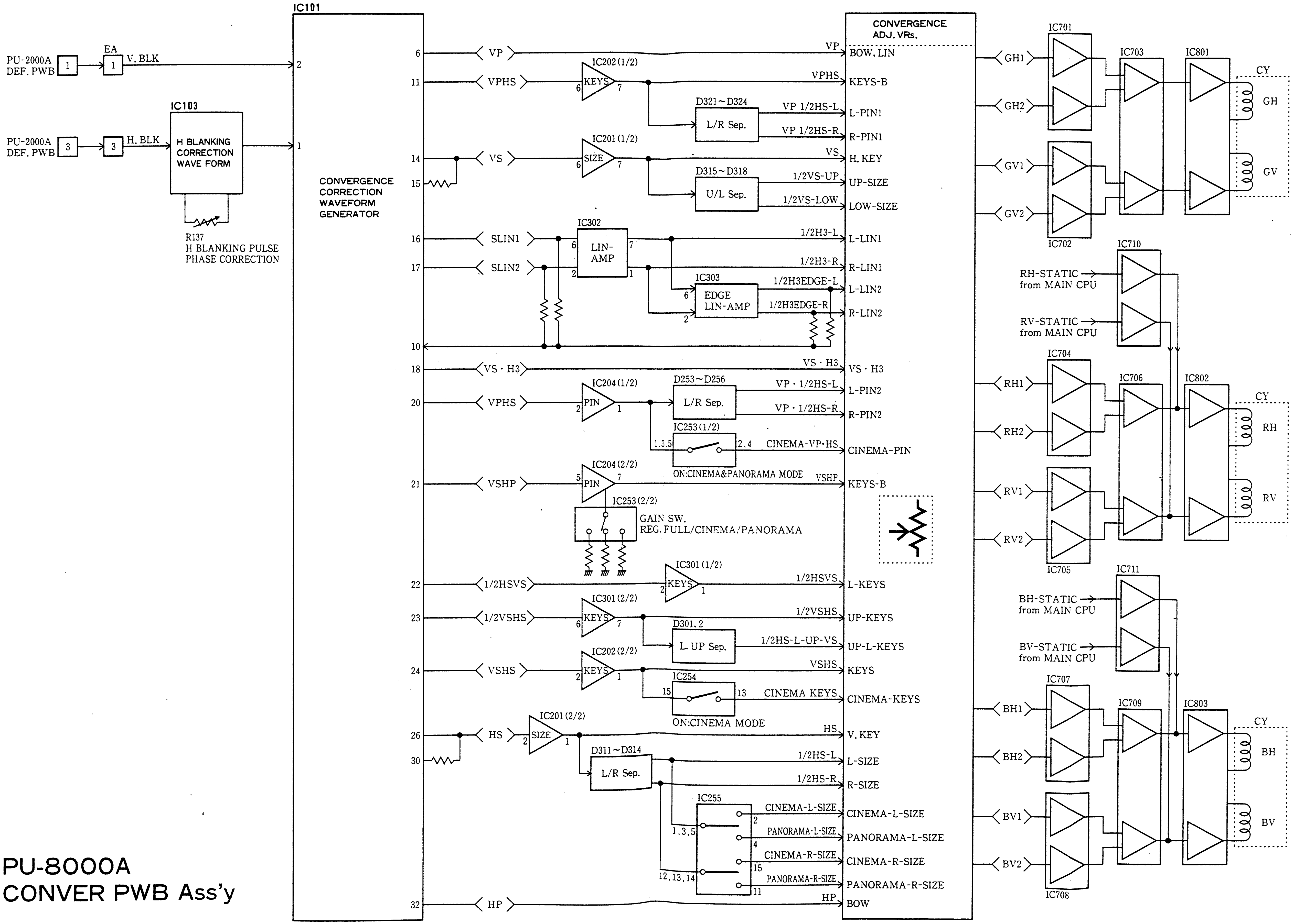

TU001 TUNER
ANTENA IN
IF
SGZ-F007A PIF MODULE
VIF SAW FILTER
PLL VIDEO DET.
IF AMP
SIF TRAP
AGC
AFT
4.5MHz TRAP
EQUALIZER
PHASE COMPENSATOR
GND
GND Vcc
IF AGC
Vcc
Q101
BUFFER
IC301
MAIN VIDEO SELECTOR
AUDIO OUT
3dB
TV VIDEO
INPUT VIDEO-1
VIDEO-2
VIDEO-3
VIDEO-4
V1
V2
V3
V4
C1
C2
Vcc
CAV
MUTE
GND
6dB
AUDIO R-CH 3
AUDIO R-CH 4
AUDIO R-CH 2
AUDIO R-CH 1
AUDIO R-CH TV
AUDIO L-CH TV
AUDIO L-CH 1
AUDIO L-CH 2
AUDIO L-CH 4
AUDIO L-CH 3
IC501
LOOP CUT SWITCH
from CPU
LINE OUT
Q501
BUFFER
MC
RA
PU-1000A
PU-7000A MICON PWB
RB
MAIN VIDEO
SB
IC401
PIP/POP VIDEO SELECTOR
PIP/POP VIDEO
PU-1100A
RECEIVER PWB
VIDEO-1 S-VIDEO 1
VIDEO-2 S-VIDEO2
VIDEO-4 S-VIDEO4
Y1
Y2
Y4
C4
MD
SA
PU-7000A MICON PWB
IC101
S-VIDEO Y/C VIDEO SELECTOR
MAIN VIDEO/Y
CHROMA
IC201
PIP/POP S-VIDEO Y/C VIDEO SELECTOR
YF
YE
Q001
B.F.
T401
D.L.
40nS
L.P.F T001
Q406~Q412
WHITE PEAK LIMITER CONTROL
APA. CON.
Q401 Q402
T402
L.P.F
1.5MHz
VIDEO/Y
1H DL
2H DL
IC101 1H DL
CLOCK DRIVER
10.7MHz
T101
10.7MHz TRAP
Q102, Q103
AMP & B.F
T102
L.P.F
10MHz
Q104
T002 3.58MHz
B.P.F
Q003~Q005
AMP & B.F.
CF602
C.F.
Q602~Q606
AMP & BUFFER
IC601
x3
fsc
fsc (3.58MHz)
IC401 ⑱ PIN
S-VHS CHROMA
IC601
Q601
B.F.
DL601
1H DL
Q603~Q604
AMP & B.F.
T601
3.58MHz B.P.F.
LOGICAL COMB CHROMA
COLOR SW
BURS GATE PLUS
MIX
Q201, Q202


HZ-4201A
LOGICAL COMB PWB
Q406~Q412
WHITE PEAK LIMITER CONTROL
Q001
B.F.
T401
D.L.
40nS
APA. CON.
Q401
Q402
T402
L.P.F
1.5MHz
VIDEO/Y
L.P.F
T001
IC101 1H DL
1H DL
CLOCK DRIVER
10.7MHz
T101
10.7MHz TRAP
Q102, Q103
AMP & B.F
T102
L.P.F
10MHz
Q104, Q105
AMP & B.F.
R132
Y LEVEL
Q407, Q408
AMP & B.F.
1H DL
2H DL
Q301
AMP
T301
DL
360nS
R418
2H DELAY GAIN
T302
DL
360nS
Q314
S-VIDEO/VIDEO
Q302, Q303
AMP & B.F.
COMB PHASE GAIN
Q307~Q310
SYNC
IC201 1H DL
T201
L.P.F
6MHz
T202
B.P.F
3.58MHz
Q204~Q209
PHASE GAIN ADJ.
2H DL
2H
T103
B.P.F
Q107~Q112
PHASE GAIN ADJ.
1H
OUT
OH
IC301
Q311
B.F.
T002 3.58MHz
B.P.F
Q003~Q005
AMP & B.F.
CF602
C.F.
Q602~Q606
AMP & BUFFER
IC601
X3
fsc
Q312, Q313
B.F.
T303
3.58MHz B.P.F
C
YF
YE
fsc (3.58MHz)
IC401
18 PIN
IC101
S-VIDEO Y/C VIDEO SELECTOR
VIDEO-1
S-VIDEO 1
VIDEO-2
S-VIDEO2
C1
C2
Y1
Y2
Y4
MAIN VIDEO/Y
CHROMA
VIDEO-4
S-VIDEO4
MD
SA
C4
PU-1000A
PU-7000A MICON PWB
IC501
LOOP CUT SWITCH
LINE OUT
from CPU
GND
RB
MAIN VIDEO
SB
Q304
AMP
DL301
DL
200nS
Y
Q303
B.F.
Y SYNC
FD
PU-7000A MICON PWB
PU-1000A
S-VHS CHROMA
LOGICAL COMB CHROMA
IC601
Q601
B.F.
DL601
1H DL
Q603~Q604
AMP & B.F.
T601
3.58MHz B.P.F.
IC401
CHROMA RESTORATION
CLAMP
ACC DET
BURST GATE
COLOR
COMPA-RATOR
1st BP AMP
KILLER DET.
APC DET
R-Y
G-Y
B-Y
VCO (3.58MHz)
TINT
COLOR SW
BURST GATE PLUSE
R411
SUB COLOR
R414
SUB TINT
+12V
Q403
B.F.
Q404
B.F.
R-Y
B-Y
PU-7000A MICON PWB
PIP/POP VIDEO
IC201
PIP/POP S-VIDEO Y/C VIDEO SELECTOR
MIX
Q201, Q202
PIP/POP VIDEO
SC
DB
ASPECT PWB
PU-1000A VIDEO PWB
PU-1200A
S-INPUT PWB
100A
VER PWB

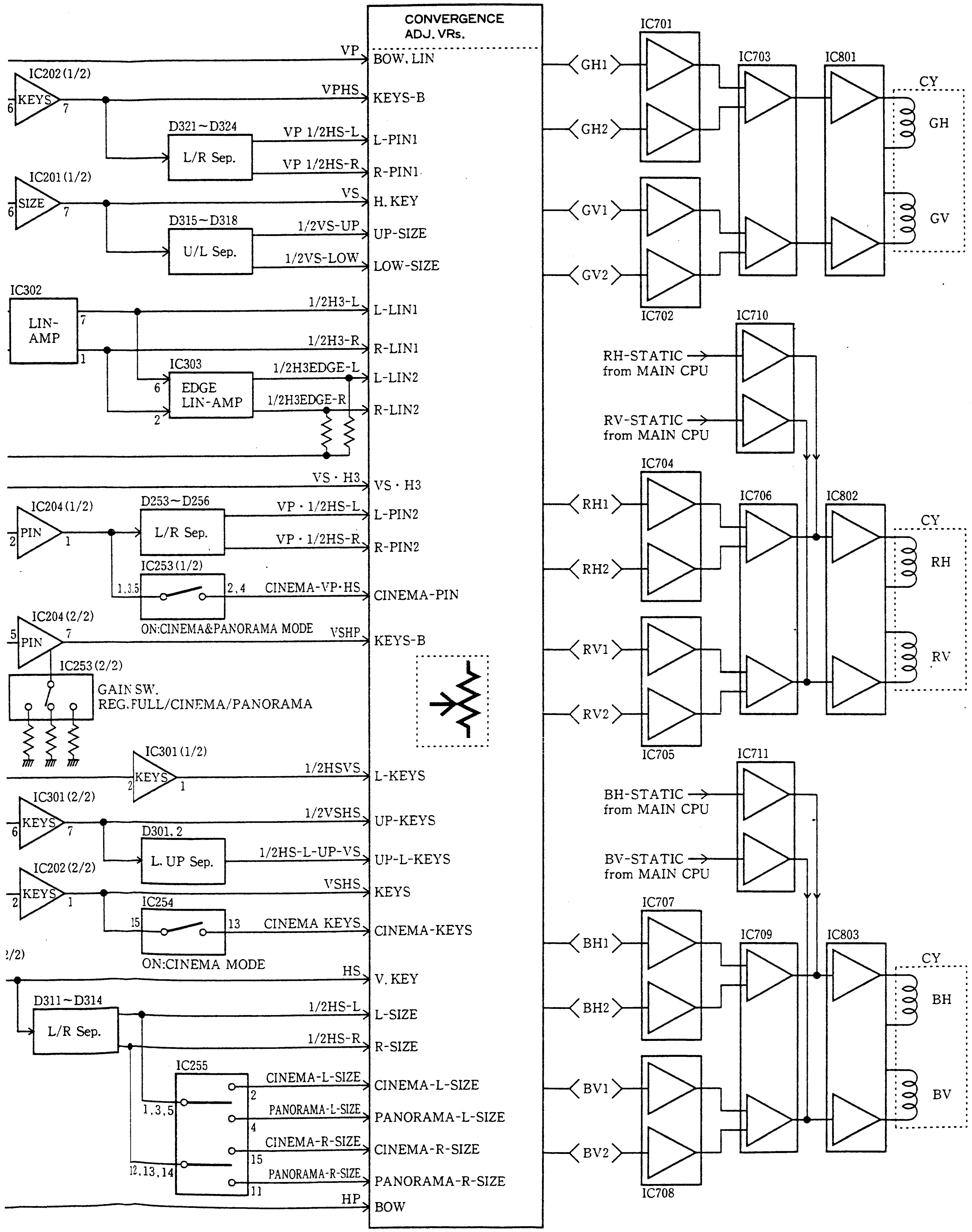

PU-1000A
FULL, CINEMA, PANORAMA MODE
REGUREL MODE
EZ-1D 002A
ASPECT CONVERTER PWB
T301 LPF
M1 AMP & CLAMP
IC101 A/D
T310 LPF
M2 AMP & CLAMP
IC102 A/D
T320 LPF
M3 AMP & CLAMP
IC103 A/D
IC202 SYNCSEP.
IC230 PD
T230 8fsc VCO
IC114, DL 6fsc VCO
IC111 CHROMA LINE MEMORY
IC112 Y LINE MEMORY
IC110 MEMORY CONTROL
IC140 D/A
T401 LPF
M4 AMP
T411 LPF
M5 AMP
T421 LPF
M6 AMP
IC401 THROUGH /REGUREL SW
DELAY ADJ.
IC601~IC606
IC501 CPU
T701 1.5M LPF
T702 3.58 BPF
IC702 CHROMA DEMODU & SYNC SEPA.
IC901 A/D MPX
IC902 PIP CONTROLER
IC902 PIP/POP SELECT
Q804~Q810 MATRIX
Q801~Q803 Ys CONT.
PU-1200A
PIP/POP VIDEO
Q211 PHASE COMP.
B.F.
Q214
Q215
IC201 COLOR/TINT ADJUSTMENT MAIN/PIP(POP) SELECTOR
CLAMP
G.C.A
MATRIX
TINT
Q220 Q221 Q222 B.F.
PIP CONT.
PIP BRIGHT
R274
R277 PIP R CUTOFF
R280 PIP B CUTOFF
TINT from MAIN CPU
Q203, Q204 AMP
COLOR from MAIN CPU
Q205, Q206 AMP
Q407 AMP
Q401 AMP
DL402 DL
DL401 DL
Q408 Q409 AMP & BUFFER
Q402 Q403 AMP & BUFFER
Q405
THEATER from MAIN CPU
THEATER CONT.
Q411 Q404
IC401 DYNAMIC MATRIX
R-Y CLAMP
B-Y CLAMP
G-Y CLAMP
135° COMPARATOR
90° COMPARATOR
CLAMP PULSE CORRECT
H PULSE
PU-7000A
from IC702 CAPTION DECODER
Q603 BUFFER
Q604 BUFFER
Q605 BUFFER
Q606 BUFFER
R606 R CUT OFF
R608 B CUT OFF
CLAMP PULSE GENERATOR
R CLAMP
R ADJUSTMENT
G CLAMP
PEDESTAL CLAMP
B CLAMP
B ADJUSTMENT
SHADOW GENERATOR
RGB/TV SELECT CONTROL
Q608, Q609 SIDE PANNEL ADJ.
from MAIN CPU
Q611 Q612 Q613
Q610 BUFFER
Q607
P. MUTE from MAIN CPU
PICTURE AREA
HV BLK
D622
NO SYNC
YS (PIP AREA)
DL301 DL 150nS
Q305~Q307 AMP & HPF
Q312
IC302 NOISE REDUCTION (APACON)
CORING
AMP
EDGE
Q310
Q311
V.N.R ON/OFF from MAIN CPU
DETAIL 1 from MAIN CPU
DETAIL 2
Q512 BUFFER
CLMP BIAS
BLACK EXTENSION AMP
BRIGHT & DC RESTORATION
PULSE CORRECT
BLACK LEVEL DETECTOR
NOT STRAIGHT CONTROL
DC SHIFT CONTROL
BLACK LEVEL
HV BLK
SYNC
V. BLK
D507
D506
INV.
Q504, Q505
CLP. PULSE
H AREA
D505
Q510 BUFFER
H PLUSE
V PARA.
Q509 INVERTER
Q511
PIP AREA
TO IC201 ⑪ PIN OPTION
ABL from HVT
Q501


IC401 THROUGH /REGUREL SW
T401 LPF M4 AMP
T411 LPF M5 AMP
T421 LPF M6 AMP
Q211 PHASE COMP.
B.F. Q214
B.F. Q215
IC201 COLOR/TINT ADJUSTMENT MAIN/PIP (POP) SELECTOR
CLAMP
G.C.A.
MATRIX
TINT
Q220 Q221 Q222 B.F.
PIP CONT.
PIP BRIGHT
R274
R277 PIP R CUTOFF
R280 PIP B CUTOFF
TINT from MAIN CPU
Q203, Q204 AMP
COLOR from MAIN CPU
AMP Q205, Q206
Q407 AMP DL402
Q401 AMP DL401
Q408 Q409 AMP & BUFFER
Q402 Q403 AMP & BUFFER
Q405
THEATER from MAIN CPU
THEATER CONT. Q411 Q404
IC401 DYNAMIC MATRIX
THEATER ON/OFF from MAIN CPU
R419 G-Y CORRECT
R-Y CLAMP
B-Y CLAMP
G-Y CLAMP
135° COMPARATOR
135° CORRECT
90° COMPARATOR
90° CORRECT
CORRECT SIGNAL FORM
CLAMP PULSE CORRECT
R-Y CORRECT OUTPUT
B-Y CORRECT OUTPUT
G-Y CORRECT OUTPUT
H PULSE
R470 135° DEF.
H PULS
HV BLK
IC601 CHROMA /ON SCREEN SELECTOR
CLAMP PULSE GENERATOR
BLK PULSE GENERATOR
R CLAMP
R ADJUSTMENT
R AMP
G CLAMP
G AMP
PEDESTAL CLAMP
B CLAMP
B ADJUSTMENT
B AMP
SHADOW GENERATOR
RGB/TV SELECT CONTROL
CONTRAST ADJUSTMENT
BRIGHT ADJUSTMENT
R SELECT
G SELECT
B SELECT
Y SELECT
R606 R CUT OFF
R608 B CUT OFF
R609 RGB BRT
PU-7000A
from IC702 CAPTION DECODER
Q603 BUFFER
Q604 BUFFER
Q605 BUFFER
Q606 BUFFER
ON SCREEN
Q608, Q609 SIDE PANNEL ADJ.
from MAIN CPU
Q611 Q612 Q613
YS
PICTURE AREA
HV BLK
Q610 BUFFER
D622 NO SYNC
Q607 P. MUTE from MAIN CPU
Q601, Q602 BUFFER
Q301, Q304 AMP
Q302, Q305 AMP
Q303, Q306 AMP
Q373, Q383 AMP
Q372, Q382 AMP
Q371, Q372 AMP
G-Y GAMMA CORRECTION
Q351~ Q356
H.V. BLK
PU-3000A CRT SOCKET PWB
CRT
R
G
B
MAIN VIDEO HD
MAIN VIDEO VD
IC901 A/D MPX
IC902 PIP CONTROLER
D/A
Q804~ Q810 MATRIX
CHROMA DEMODU & SYNC SEPA.
IC702
IC902 PIP/POP SELECT
Q801~ Q803 Ys CONT.
YS (PIP AREA)
SUB R SUB G SUB B
EZ-1D002A ASPECT CONVERTER PWB
DL301 DL 150nS
Q305~Q307 AMP & HPF
LPF
IC302 NOISE REDUCTION (APACON)
CORING
EDGE
AMP
X2
Q312
Q311
Q310
DETAIL 2
V.N.R ON/OFF from MAIN CPU
DETAIL 1 from MAIN CPU
Q512 BUFFER
CLMP BIAS
BLACK EXTENSION AMP
BRIGHT & DC RESTORATION
BLK & OUTPUT
PULSE CORRECT
BLACK LEVEL DETECTOR
NOT STRAIGHT CONTROL
DC SHIFT CONTROL
CONTRAST CONTROL
BRITE from MAIN CPU
ABL from HVT
Q513 BUFFER
1K from CRT SOCKET
IC501 Y GRADATION CORRECT
BLACK LEVEL
D507
HV BLK
D506
SYNC
V. BLK
INV.
Q504, Q505
CLP PULSE
H AREA
D505
Q510 BUFFER
H PLUSE
Q509 INVERTER
V PARA.
Q511
PIP AREA
BLACK LEVEL
+12V
TO IC201 (11) PIN OPTION
ABL from HVT
PICTURE from MAIN CPU
Q501
D624 D625
NO SYNC
P. MUTE
PU-1000A VIDEO PWB

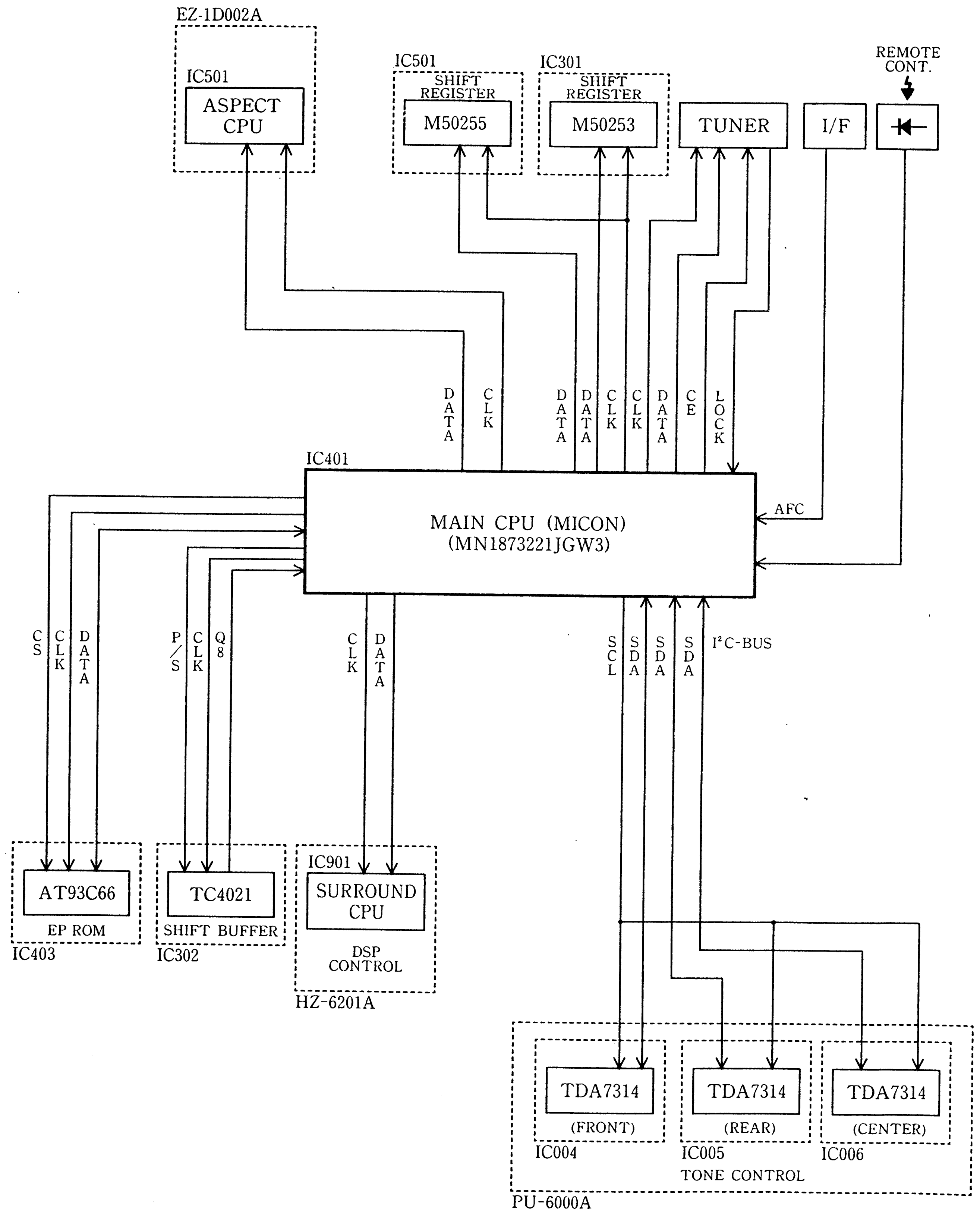
DETAILED BLOCK DIAGRAM (CONVER)


IC101
CONVERGENCE CORRECTION WAVEFORM GENERATOR
PU-2000A DEF. PWB
EA
V. BLK
H. BLK
IC103
H BLANKING CORRECTION WAVE FORM
R137
H BLANKING PULSE PHASE CORRECTION
VP
VPHS
VS
SLIN1
SLIN2
VS · H3
VSHP
1/2HSVS
1/2VSHS
VSHS
HS
HP
IC202 (1/2)
KEYS
D321~D324
L/R Sep.
VP 1/2HS-L
VP 1/2HS-R
IC201 (1/2)
SIZE
D315~D318
U/L Sep.
1/2VS-UP
1/2VS-LOW
IC302
LIN-AMP
1/2H3-L
1/2H3-R
IC303
EDGE LIN-AMP
1/2H3EDGE-L
1/2H3EDGE-R
IC204 (1/2)
PIN
D253~D256
VP · 1/2HS-L
VP · 1/2HS-R
IC253 (1/2)
CINEMA-VP·HS
ON:CINEMA&PANORAMA MODE
IC204 (2/2)
IC253 (2/2)
GAIN SW.
REG. FULL/CINEMA/PANORAMA
IC301 (1/2)
IC301 (2/2)
D301, 2
L. UP Sep.
1/2HS-L-UP-VS
IC202 (2/2)
IC254
CINEMA KEYS
ON:CINEMA MODE
IC201 (2/2)
D311~D314
1/2HS-L
1/2HS-R
IC255
CINEMA-L-SIZE
PANORAMA-L-SIZE
CINEMA-R-SIZE
PANORAMA-R-SIZE
CONVERGENCE ADJ. VRs.
BOW, LIN
KEYS-B
L-PIN1
R-PIN1
H. KEY
UP-SIZE
LOW-SIZE
L-LIN1
R-LIN1
L-LIN2
R-LIN2
VS · H3
L-PIN2
R-PIN2
CINEMA-PIN
KEYS-B
L-KEYS
UP-KEYS
UP-L-KEYS
KEYS
CINEMA-KEYS
V. KEY
L-SIZE
R-SIZE
CINEMA-L-SIZE
PANORAMA-L-SIZE
CINEMA-R-SIZE
PANORAMA-R-SIZE
BOW
GH1
GH2
GV1
GV2
IC701
IC702
IC703
IC801
CY
GH
GV
IC710
RH-STATIC from MAIN CPU
RV-STATIC from MAIN CPU
RH1
RH2
RV1
RV2
IC704
IC705
IC706
IC802
RH
RV
IC711
BH-STATIC from MAIN CPU
BV-STATIC from MAIN CPU
BH1
BH2
BV1
BV2
IC707
IC708
IC709
IC803
BH
BV

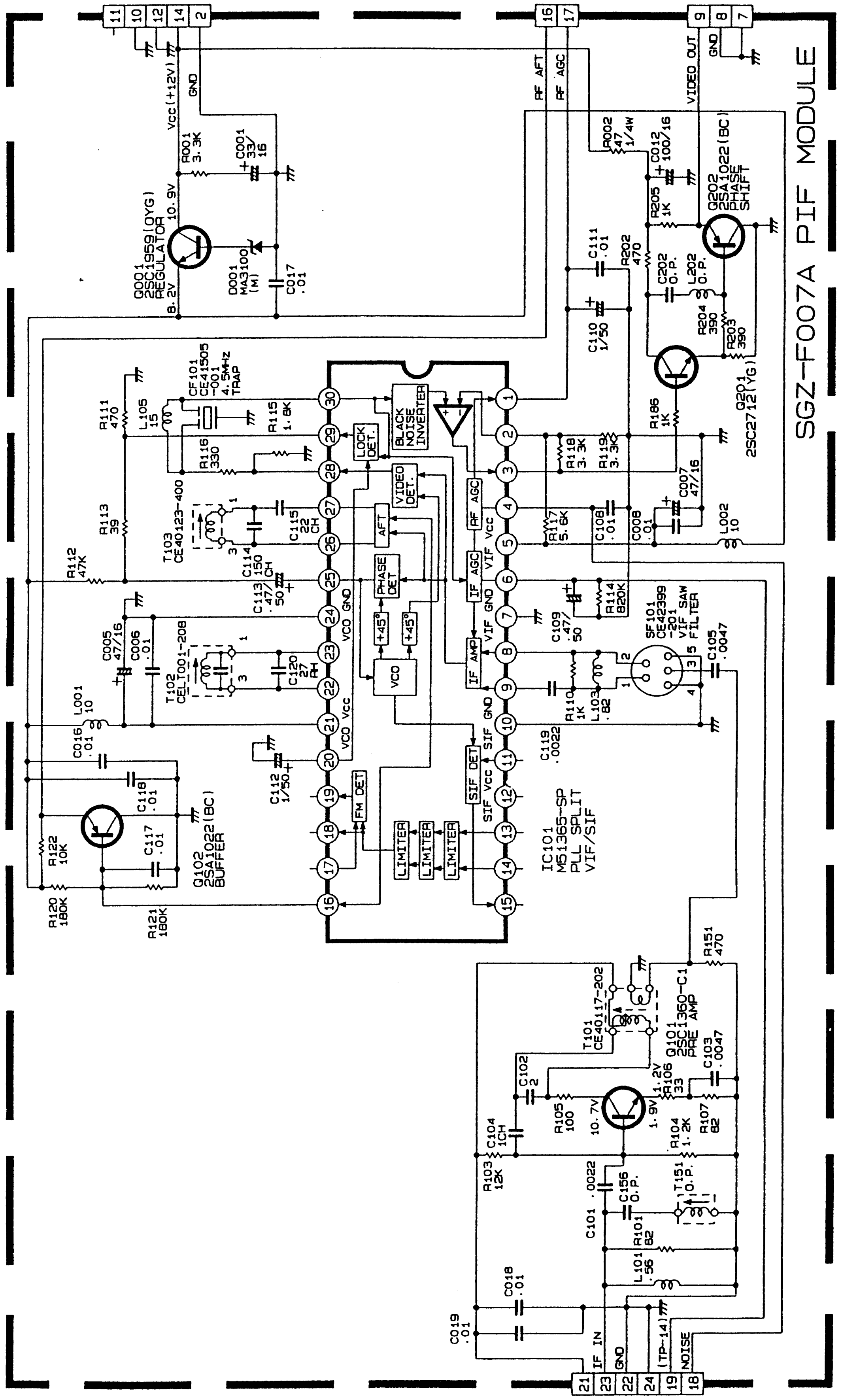
PU-8000A
CONVER PWB Ass'y


CONVERGENCE ADJ. VRs.
VP
BOW, LIN
IC202 (1/2)
KEYS
VPHS
KEYS-B
D321～D324
L/R Sep.
VP 1/2HS-L
L-PIN1
VP 1/2HS-R
R-PIN1
IC201 (1/2)
SIZE
VS
H. KEY
D315～D318
U/L Sep.
1/2VS-UP
UP-SIZE
1/2VS-LOW
LOW-SIZE
IC302
LIN-AMP
1/2H3-L
L-LIN1
1/2H3-R
R-LIN1
IC303
EDGE LIN-AMP
1/2H3EDGE-L
L-LIN2
1/2H3EDGE-R
R-LIN2
VS・H3
VS・H3
IC204 (1/2)
PIN
D253～D256
L/R Sep.
VP・1/2HS-L
L-PIN2
VP・1/2HS-R
R-PIN2
IC253 (1/2)
1,3,5
2,4
CINEMA-VP・HS
CINEMA-PIN
ON:CINEMA&PANORAMA MODE
IC204 (2/2)
PIN
VSHP
KEYS-B
IC253 (2/2)
GAIN SW.
REG.FULL/CINEMA/PANORAMA
IC301 (1/2)
KEYS
1/2HSVS
L-KEYS
IC301 (2/2)
KEYS
1/2VSHS
UP-KEYS
D301, 2
L. UP Sep.
1/2HS-L-UP-VS
UP-L-KEYS
IC202 (2/2)
KEYS
VSHS
KEYS
IC254
CINEMA KEYS
CINEMA-KEYS
ON:CINEMA MODE
HS
V. KEY
D311～D314
L/R Sep.
1/2HS-L
L-SIZE
1/2HS-R
R-SIZE
IC255
1,3,5
12,13,14
CINEMA-L-SIZE
CINEMA-L-SIZE
PANORAMA-L-SIZE
PANORAMA-L-SIZE
CINEMA-R-SIZE
CINEMA-R-SIZE
PANORAMA-R-SIZE
PANORAMA-R-SIZE
HP
BOW
GH1
GH2
GV1
GV2
IC701
IC702
IC703
IC801
CY
GH
GV
IC710
RH-STATIC from MAIN CPU
RV-STATIC from MAIN CPU
RH1
RH2
RV1
RV2
IC704
IC705
IC706
IC802
CY
RH
RV
IC711
BH-STATIC from MAIN CPU
BV-STATIC from MAIN CPU
BH1
BH2
BV1
BV2
IC707
IC708
IC709
IC803
CY
BH
BV

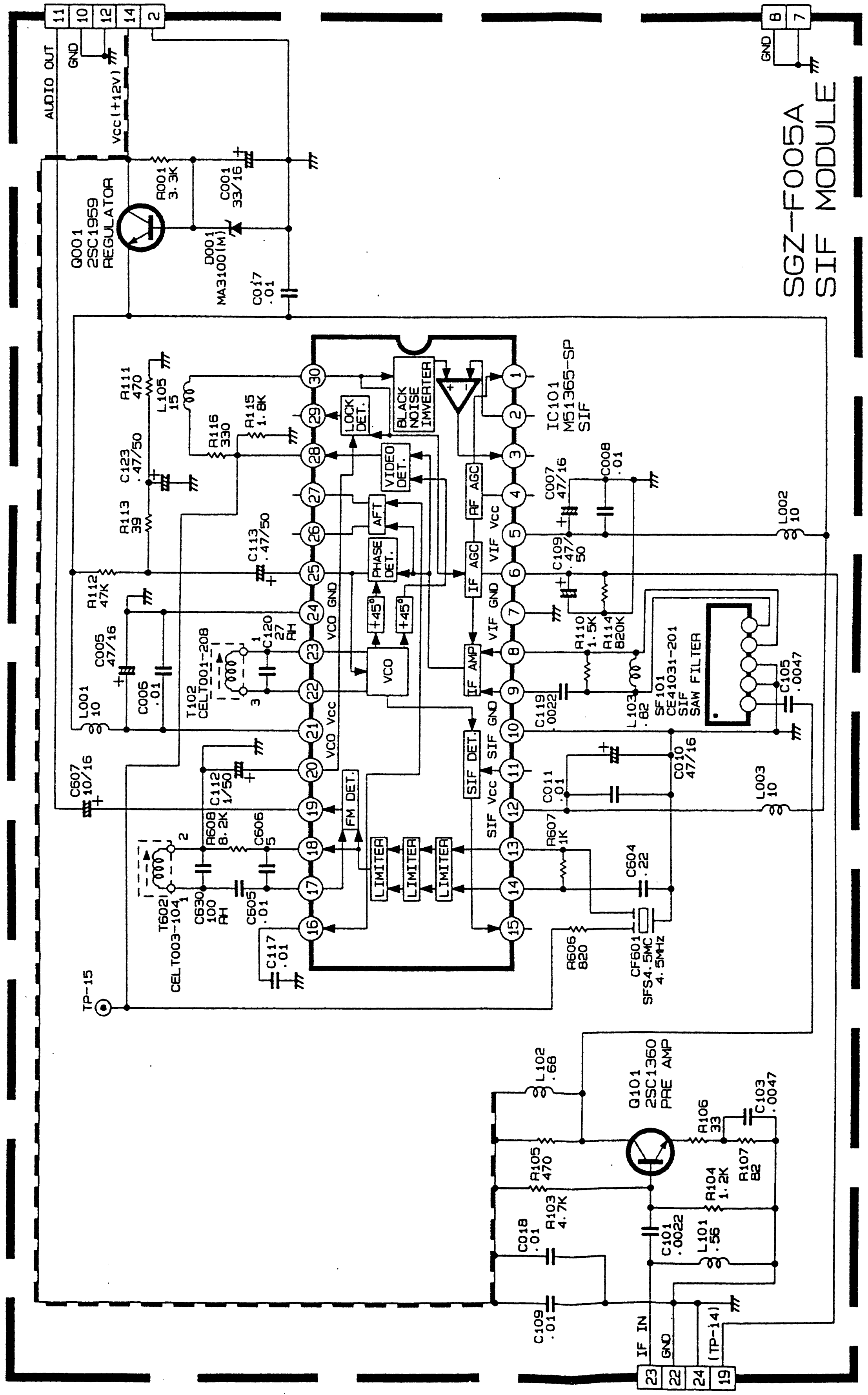
DETAILED BLOCK DIAGRAM (MICROCOMPUTER)


EZ-1D002A
IC501
ASPECT CPU
IC501
SHIFT REGISTER
M50255
IC301
SHIFT REGISTER
M50253
TUNER
I/F
REMOTE CONT.
DATA
CLK
DATA
DATA
CLK
CLK
DATA
CE
LOCK
IC401
MAIN CPU (MICON)
(MN1873221JGW3)
AFC
CS
CLK
DATA
P/S
CLK
Q8
CLK
DATA
SCL
SDA
SDA
SDA
I²C-BUS
AT93C66
EP ROM
IC403
TC4021
SHIFT BUFFER
IC302
IC901
SURROUND CPU
DSP CONTROL
HZ-6201A
TDA7314
(FRONT)
IC004
TDA7314
(REAR)
IC005
TDA7314
(CENTER)
IC006
TONE CONTROL
PU-6000A

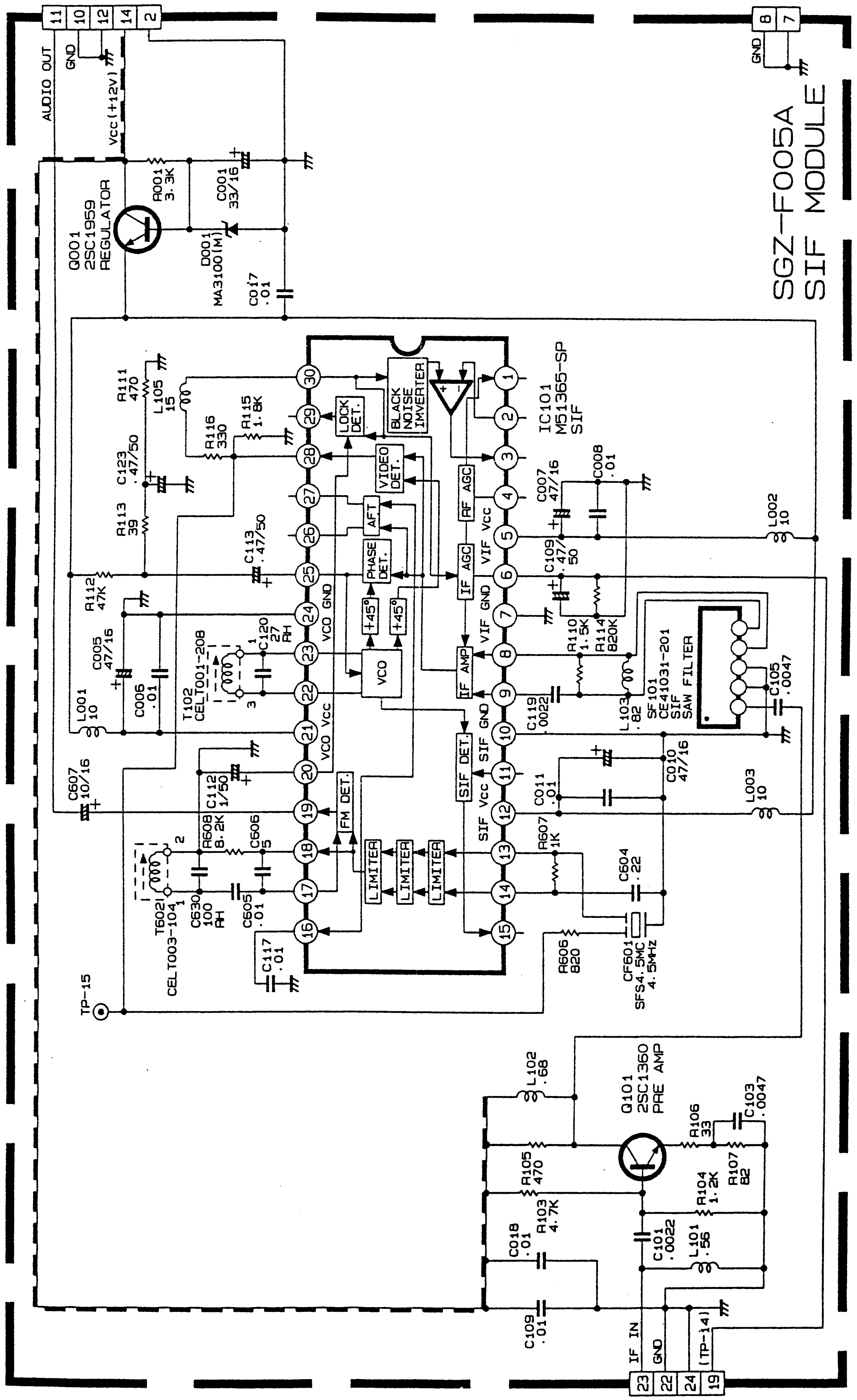
PIF PWB CIRCUIT DIAGRAMS (SGZ-F007A)


SGZ-F007A PIF MODULE
IC101 M51365-SP PLL SPLIT VIF/SIF
Q001 2SC1959(OYG) REGULATOR
D001 MA3100 (M)
Q202 2SA1022(BC) PHASE SHIFT
Q201 2SC2712(YG)
Q102 2SA1022(BC) BUFFER
Q101 2SC1360-C1 PRE AMP
T101 CE40117-202
T102 CELT001-208
T103 CE40123-400
CF101 CE41505 -001 4.5MHz TRAP
SF101 CE42399 -201 VIF SAW FILTER
BLACK NOISE INVERTER
LOCK DET.
VIDEO DET.
AFT
PHASE DET
VCO
RF AGC
IF AGC
IF AMP
SIF DET.
FM DET
LIMITER
Vcc (+12V)
GND
RF AFT
RF AGC
VIDEO OUT
IF IN
(TP-14)
NOISE

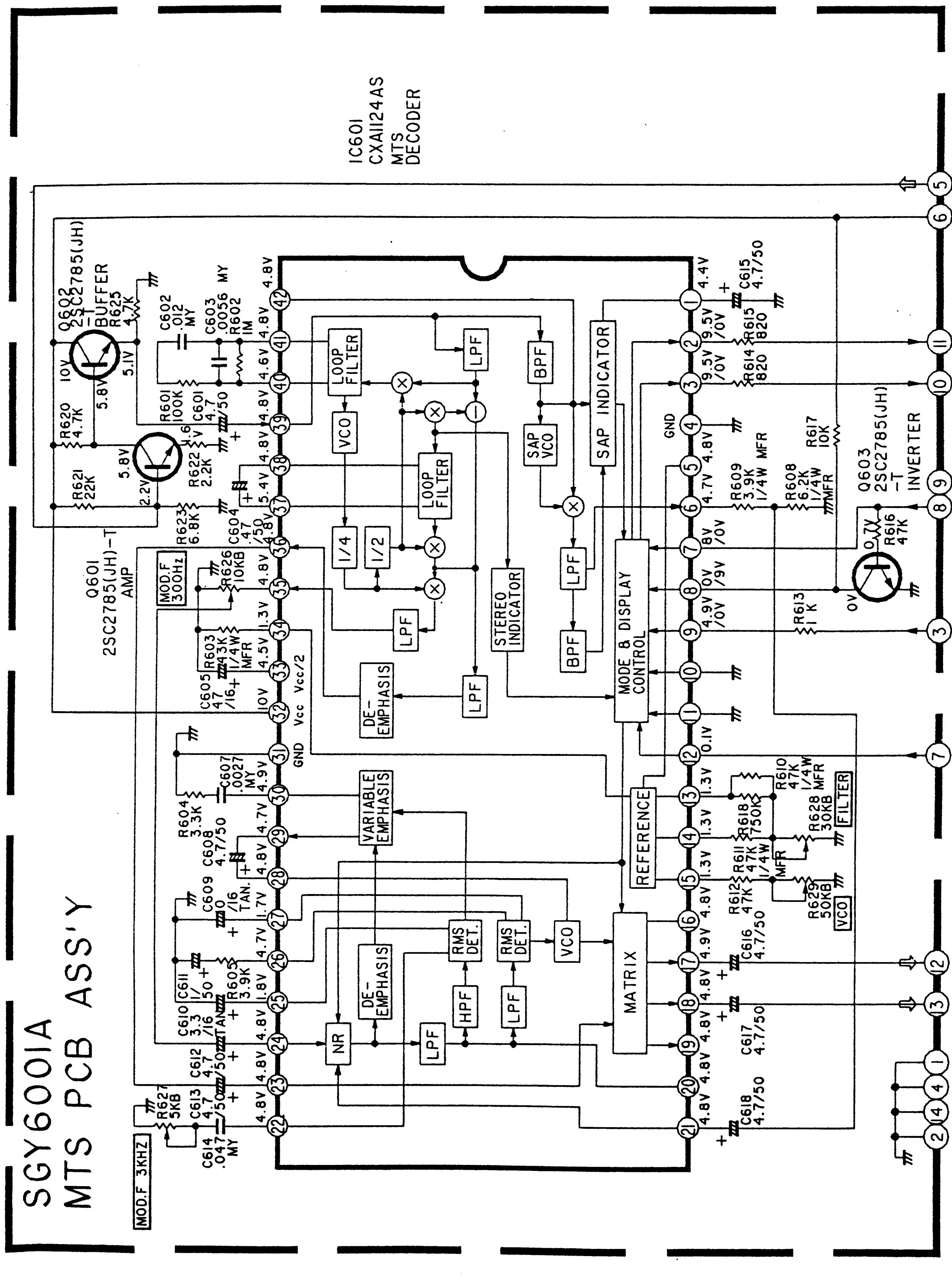
SIF PWB CIRCUIT DIAGRAMS (SGZ-F005A)


SGZ-F005A SIF MODULE
IC101 M51365-SP SIF
Q001 2SC1959 REGULATOR
D001 MA3100(M)
Q101 2SC1360 PRE AMP
T102 CELT001-208
T602 CELT003-104
SF101 CE41031-201 SIF SAW FILTER
CF601 SFS4.5MC 4.5MHz
BLACK NOISE INVERTER
LOCK DET.
VIDEO DET.
AFT
PHASE DET.
VCO
RF AGC
IF AGC
IF AMP
SIF DET.
FM DET.
LIMITER
AUDIO OUT
GND
Vcc (+12V)
TP-15
IF IN
(TP-14)

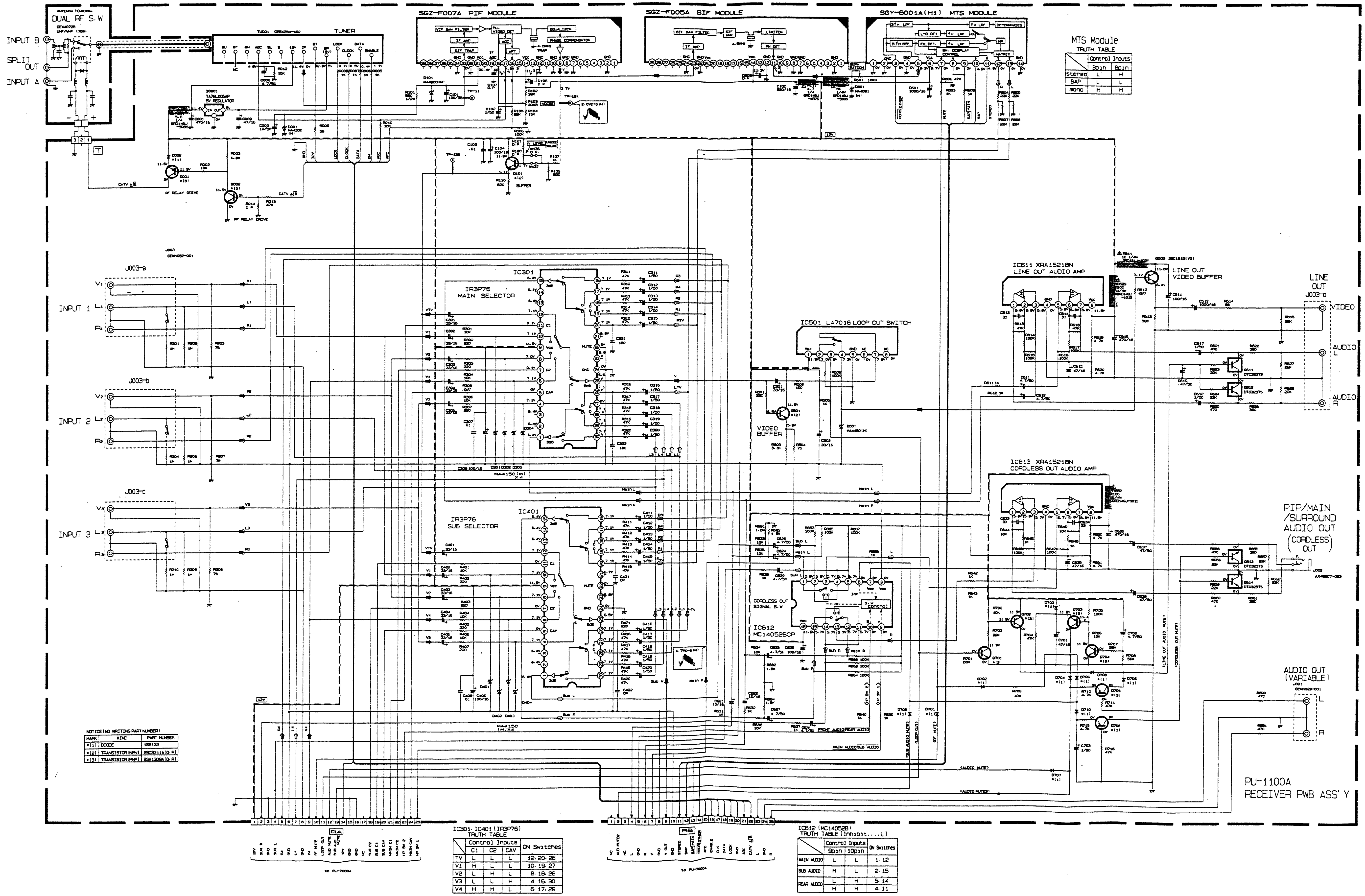
SIF PWB CIRCUIT DIAGRAMS (SGZ-F005A)


SGZ-F005A
SIF MODULE
AUDIO OUT
GND
Vcc(+12V)
Q001
2SC1959
REGULATOR
R001
3.3K
C001
33/16
D001
MA3100(M)
C017
.01
IC101
M51365-SP
SIF
BLACK NOISE INVERTER
LOCK DET.
VIDEO DET.
AFT
PHASE DET.
+45°
VCO
RF AGC
IF AGC
IF AMP
SIF DET.
FM DET.
LIMITER
VIF Vcc
VIF GND
VCO GND
VCO Vcc
SIF Vcc
SIF GND
R111
470
L105
15
R116
330
R115
1.8K
C123
.47/50
R113
39
C113
.47/50
R112
47K
C005
47/16
C006
.01
T102
CELT001-208
C120
27
L001
10
C607
10/16
C112
1/50
R608
8.2K
C606
5
T602
CELT003-104
C630
100
C605
.01
C117
.01
C007
47/16
C008
.01
L002
10
C109
.47/50
R110
1.5K
R114
820K
SF101
CE41031-201
SIF SAW FILTER
C105
.0047
L103
.82
C119
.0022
C010
47/16
C011
.01
L003
10
R607
1K
C604
.22
CF601
SFS4.5MC
4.5MHz
R606
820
TP-15
L102
.68
Q101
2SC1360
PRE AMP
R105
470
R106
33
C103
.0047
R103
4.7K
R104
1.2K
R107
82
C018
.01
C101
.0022
L101
.56
C109
.01
IF IN
GND
(TP-14)
23
22
24
19
11
10
12
14
2
8
7

MTS PWB CIRCUIT DIAGRAMS (SGY6001A(H1))


SGY6001A
MTS PCB ASS'Y
IC601
CXA1124AS
MTS
DECODER
VCC IN
STEREO DISPLAY
SAP DISPLAY
MAIN SAP
MONO OTHER
MUTE ON OFF
R
L
OUT
GND
Q602
2SC2785(JH)
BUFFER
R625
4.7K
Q601
2SC2785(JH)-T
AMP
Q603
2SC2785(JH)-T
INVERTER
R616
47K
R617
10K
LOOP FILTER
VCO
LPF
BPF
SAP VCO
SAP INDICATOR
STEREO INDICATOR
MODE & DISPLAY CONTROL
1/4
1/2
DE-EMPHASIS
VARIABLE EMPHASIS
REFERENCE
MATRIX
RMS DET.
HPF
NR
FILTER
MOD.F 300Hz
MOD.F 3KHZ
C602
.012 MY
C603
.0056 MY
R602
1M
R601
100K
C601
4.7/50
R620
4.7K
R621
22K
R622
2.2K
R623
6.8K
C604
47/50
R626
10KB
R603
43K 1/4W MFR
C605
47/16
C607
.0027 MY
R604
3.3K
C608
4.7/50
C609
10/16 TAN.
C611
1/50
R605
3.9K
C610
3.3/16 TAN.
C612
4.7/50
C613
4.7/50
C614
.047 MY
R627
5KB
C615
4.7/50
R615
820
R614
820
R609
3.9K 1/4W MFR
R608
6.2K 1/4W MFR
R613
1K
R610
47K 1/4W MFR
R628
30KB
R618
750K
R611
47K 1/4W MFR
R612
47K
R629
50KB
C616
4.7/50
C617
4.7/50
C618
4.7/50
4.4V
9.5V /0V
4.8V
4.7V
8V /0V
0V /9V
4.9V /0V
0.1V
1.3V
10V
Vcc
Vcc/2
GND
5.8V
5.1V
2.2V
0V
0.7V

RECEIVER PWB CIRCUIT DIAGRAMS (PU-1100A)


ANTENNA TERMINAL
DUAL RF S.W
INPUT B
SPLIT OUT
INPUT A
TUNER
SGZ-F007A PIF MODULE
SGZ-F005A SIF MODULE
SGY-6001A(H1) MTS MODULE
RF RELAY DRIVE
BUFFER
IC301
IR3P76
MAIN SELECTOR
IC401
IR3P76
SUB SELECTOR
J003-a
INPUT 1
J003-b
INPUT 2
J003-c
INPUT 3
IC501 LA7016 LOOP CUT SWITCH
VIDEO BUFFER
IC611 XRA15218N
LINE OUT AUDIO AMP
LINE OUT VIDEO BUFFER
LINE OUT
J003-d
VIDEO
AUDIO L
AUDIO R
IC613 XRA15218N
CORDLESS OUT AUDIO AMP
PIP/MAIN /SURROUND AUDIO OUT (CORDLESS) OUT
CORDLESS OUT SIGNAL S.W
IC612
MC14052BCP
AUDIO OUT (VARIABLE)
L
R
PU-1100A
RECEIVER PWB ASS'Y
RA
RB
to PU-7000A
to PU-7000A

MTS Module
TRUTH TABLE

	Control Inputs	
	3pin	8pin
stereo	L	H
SAP	L	L
mono	H	H

NOTICE(NO WRITING PART NUMBER)

MARK	KIND	PART NUMBER
*(1)	DIODE	1SS133
*(2)	TRANSISTOR(NPN)	2SC3311A(Q・R)
*(3)	TRANSISTOR(PNP)	2SA1309A(Q・R)

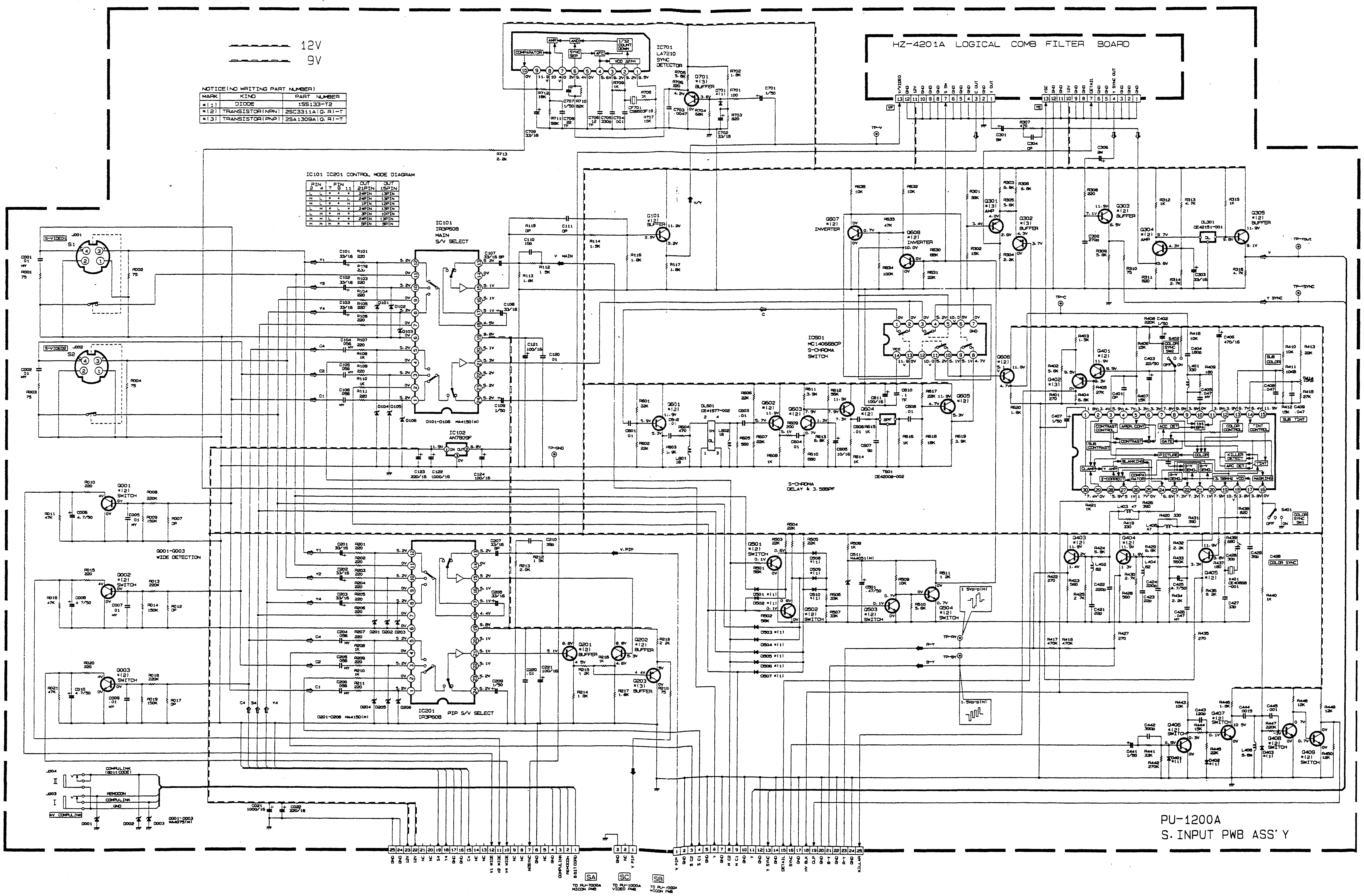
IC301・IC401(IR3P76)
TRUTH TABLE

	Control Inputs			ON Switches
	C1	C2	CAV	
TV	L	L	L	12・20・26
V1	H	L	L	10・19・27
V2	L	H	L	8・18・26
V3	L	L	H	4・16・30
V4	H	H	L	6・17・29

IC612 (MC14052B)
TRUTH TABLE (Innibit....L)

	Control Inputs		ON Switches
	9pin	10pin	
MAIN AUDIO	L	L	1・12
SUB AUDIO	H	L	2・15
REAR AUDIO	L	H	5・14
	H	H	4・11

S-INPUT PWB CIRCUIT DIAGRAMS (PU-1200A)



12V
9V
IC701 LA7210 SYNC DETECTOR
HZ-4201A LOGICAL COMB FILTER BOARD
IC101 IR3P608 MAIN S/V SELECT
IC102 AN7809F
IC201 IR3P608 PIP S/V SELECT
IC501 MC14066BCP S-CHROMA SWITCH
S-CHROMA DELAY & 3.58BPF
Q001-Q003 WIDE DETECTION
S-VIDEO1
S-VIDEO2
COMPULINK
PU-1200A
S. INPUT PWB ASS'Y
SA TO PU-7000A MICON PWB
SC TO PU-1000A VIDEO PWB
SB TO PU-7000A MICON PWB

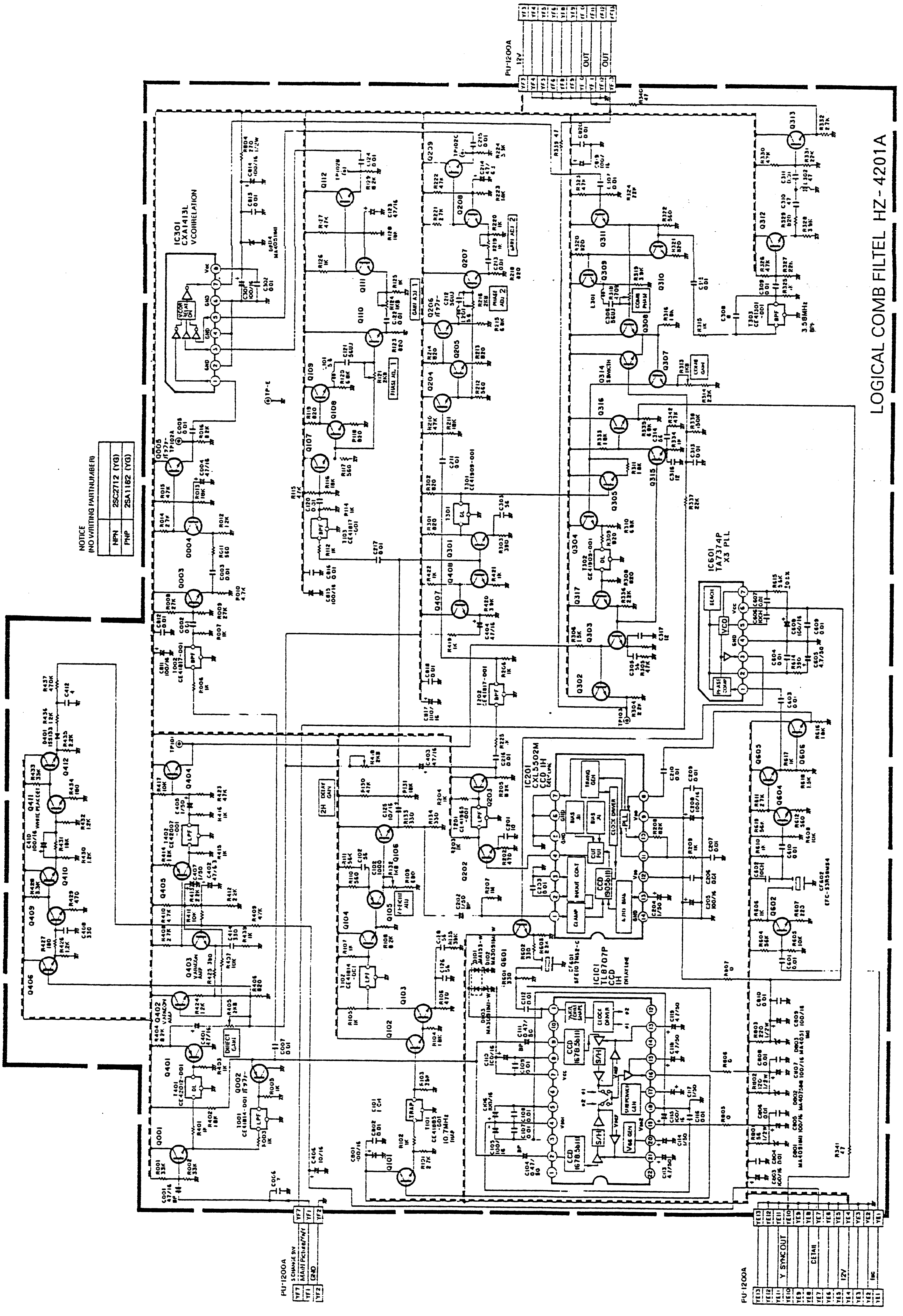
NOTICE(NO WRITING PART NUMBER)

MARK	KIND	PART NUMBER
*(1)	DIODE	1SS133-T2
*(2)	TRANSISTOR(NPN)	2SC3311A(Q. R)-T
*(3)	TRANSISTOR(PNP)	2SA1309A(Q. R)-T

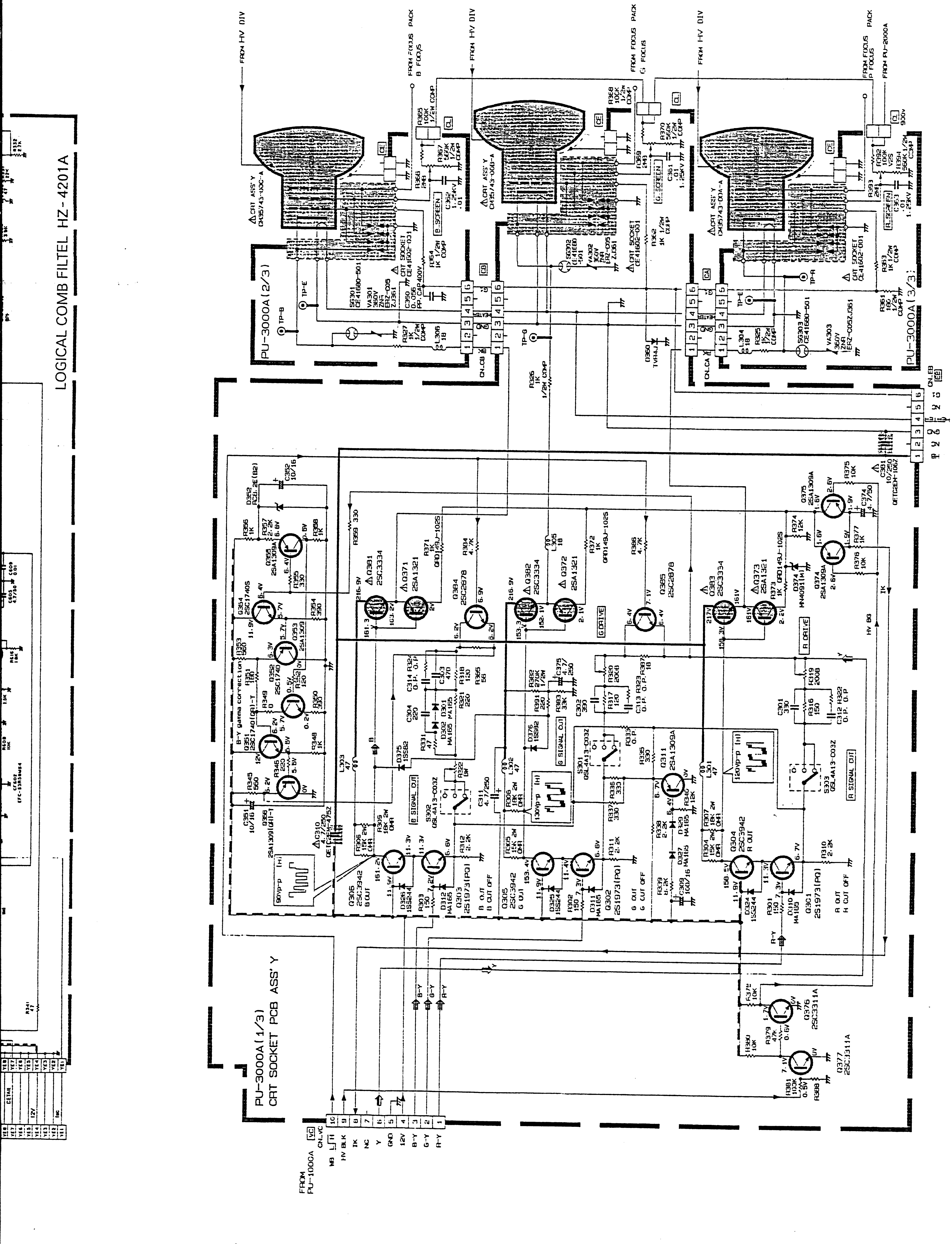
IC101 IC201 CONTROL MODE DIAGRAM

PIN 2	PIN 4	PIN 7	PIN 9	PIN 11	OUT 21PIN	OUT 15PIN
L	L	*	*	*	24PIN	13PIN
H	L	*	*	L	24PIN	13PIN
H	L	*	*	H	1PIN	12PIN
L	H	*	L	*	24PIN	13PIN
L	H	*	H	*	3PIN	10PIN
H	H	L	*	*	24PIN	13PIN
H	H	H	*	*	5PIN	8PIN

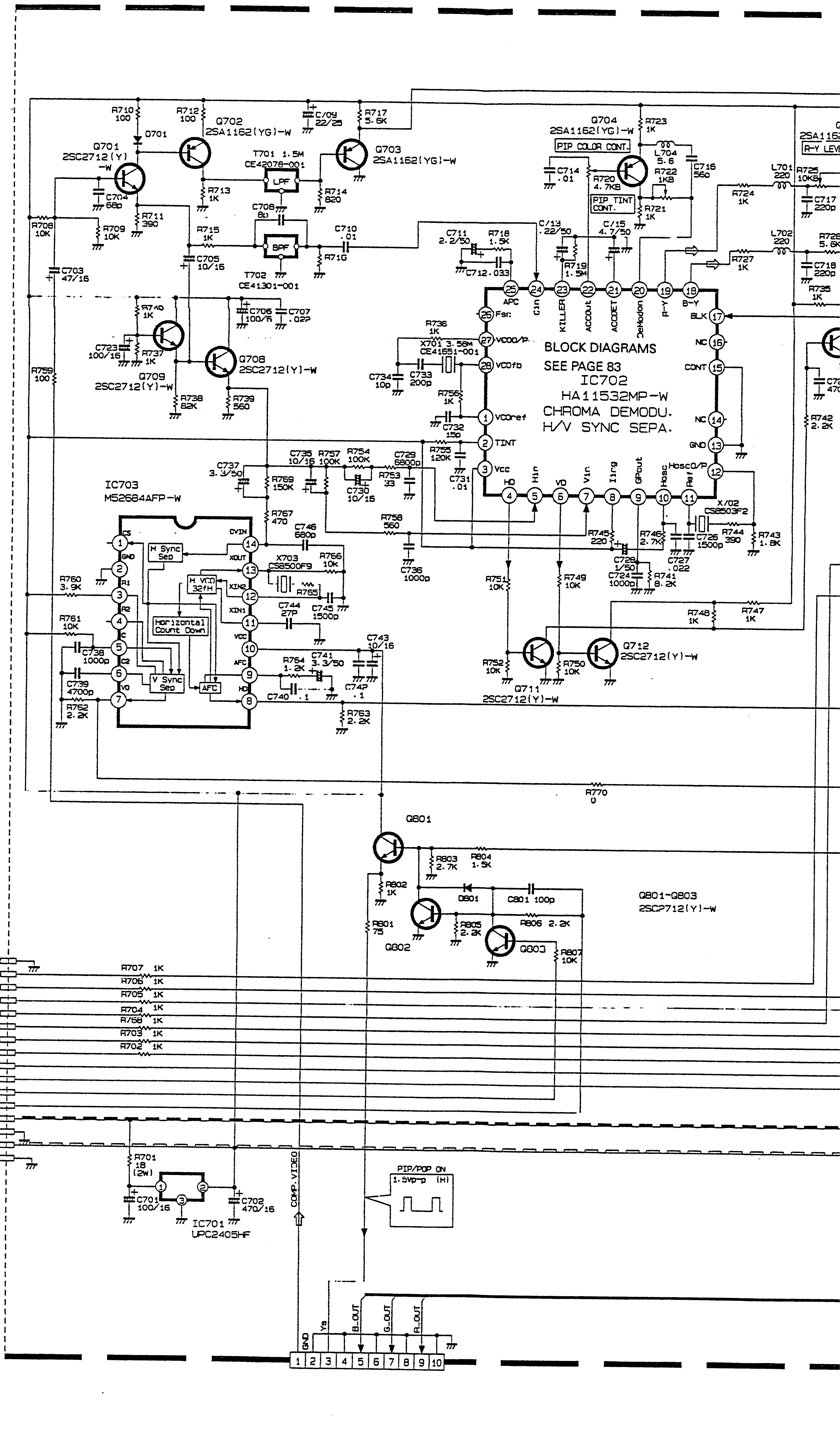
LOGICAL COMB FILTER PWB CIRCUIT DIAGRAMS (HZ-4201A)

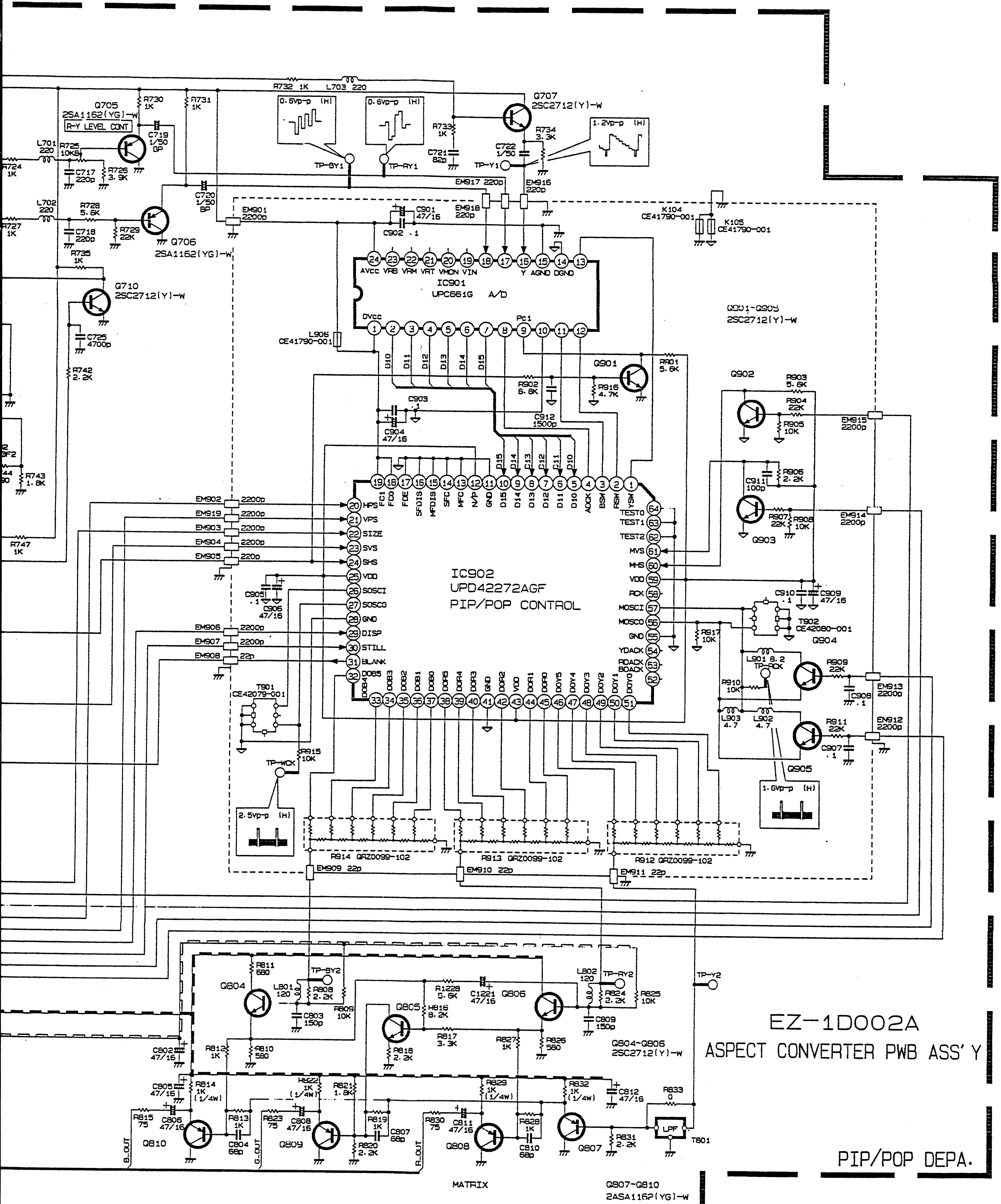

LOGICAL COMB FILTEL HZ-4201A
NOTICE
(NO WRITING PARTNUMBER)
NPN 2SC2712 (YG)
PNP 2SA1162 (YG)
IC301 CXA1413L V CORRELATION
IC601 TA7374P X3 PLL
IC201 CXL5502M CCD 1H
IC101 TL8707P CCD 1H
PU-1200A
12V
OUT
Y SYNC OUT
12V
GND
3.58MHz

CRT SOCKET PWB CIRCUIT DIAGRAMS (PU-3000A)


LOGICAL COMB FILTEL HZ-4201A
PU-3000A (1/3)
CRT SOCKET PCB ASS'Y
PU-3000A (2/3)
PU-3000A (3/3)
FROM HV DIV
FROM FOCUS PACK B FOCUS
FROM FOCUS PACK G FOCUS
FROM FOCUS PACK R FOCUS
FROM PU-2000A
FROM PU-1000A
CRT ASS'Y CM35743-00C-A
CRT ASS'Y CM35743-00B-A
CRT ASS'Y CM35743-00A-A
CRT SOCKET CE41602-001
B SCREEN
G SCREEN
R SCREEN
TP-B
TP-E
TP-G
TP-R
CN_CB
CN_CA
CN_EB
CN_VC
B DRIVE
G DRIVE
R DRIVE
B SIGNAL CUT
G SIGNAL CUT
R SIGNAL CUT
B OUT B CUT OFF
G OUT G CUT OFF
R OUT R CUT OFF
B-Y gamma correction
80Vp-p (H)
130Vp-p (H)
120Vp-p (H)
WB
HV BLK
IK
NC
Y
GND
12V
B-Y
G-Y
R-Y
HV BG
Q381 2SC3334
Q382 2SC3334
Q383 2SC3334
Q371 2SA1321
Q372 2SA1321
Q373 2SA1321
Q384 2SC2878
Q385 2SC2878
Q306 2SC3942 B OUT
Q305 2SC3942 G OUT
Q304 2SC3942 R OUT
Q303 2SJ973(PQ)
Q302 2SJ973(PQ)
Q301 2SJ973(PQ)
Q311 2SA1309A
Q374 2SA1309A
Q375 2SA1309A
Q376 2SC3311A
Q377 2SC3311A
S301 0SL4A13-C032
S302 0SL4A13-C032
S303 0SL4A13-C03Z

ASPECT CONVERTER PWB CIRCUIT DIAGRAMS-2 (EZ-1D002A)


R710 100
D701
R712 100
Q702 2SA1162(YG)-W
C709 22/25
R717 5.6K
Q703 2SA1162(YG)-W
Q701 2SC2712(Y)-W
C704 68p
R711 390
R708 10K
R709 10K
R713 1K
T701 1.5M CE42078-001
LPF
C708 8p
BPF
T702 CE41301-001
R714 820
R715 1K
C705 10/16
R716
C710 .01
C703 47/16
R740 1K
C706 100/6
C707 .022
C723 100/16
R737 1K
Q709 2SC2712(Y)-W
Q708 2SC2712(Y)-W
R738 82K
R739 560
R759 100
Q704 2SA1162(YG)-W
R723 1K
PIP COLOR CONT.
L704 5.6
C714 .01
R720 4.7KB
R722 1KB
C716 560
PIP TINT CONT.
R721 1K
C711 2.2/50
R718 1.5K
C712 .033
C713 .22/50
R719 1.5M
C715 4.7/50
R724 1K
L701 220
R725 10KB
C717 220p
L702 220
R727 1K
R728 5.6K
C718 220p
R735 1K
2SA1162
R-Y LEVEL
APC
Gin
KILLER
ACCout
ACCDET
DeModon
R-Y
B-Y
Fsc
BLK
VCOO/P
VCOfb
VCOref
TINT
Vcc
NC
CONT
NC
GND
HoscO/P
HD
Hin
VD
Vin
IIrg
GPout
Hosc
Ref
BLOCK DIAGRAMS
SEE PAGE 83
IC702
HA11532MP-W
CHROMA DEMODU.
H/V SYNC SEPA.
R736 1K
X701 3.58M CE41651-001
C734 10p
C733 200p
R756 1K
C732 15p
R755 120K
C731 .01
C735 10/16
R757 100K
R754 100K
C729 6800p
R753 33
C730 10/16
C737 3.3/50
R769 150K
R767 470
R758 560
C736 1000p
R745 220
C728 1/50
C724 1000p
R746 2.7K
C726 1500p
R744 390
X702 CSB503F2
R743 1.8K
C727 .022
R741 8.2K
R742 2.2K
R751 10K
R749 10K
R748 1K
R747 1K
Q712 2SC2712(Y)-W
Q711 2SC2712(Y)-W
R752 10K
R750 10K
IC703
M52684AFP-W
CS
GND
R1
R2
C
C2
VO
CVIN
XOUT
XIN2
XIN1
VCC
AFC
HD
H Sync Sep
H VCO 32fH
Horizontal Count Down
V Sync Sep
AFC
C746 680p
X703 CSB500F9
R766 10K
R765
C744 27P
C745 1500p
C743 10/16
R764 1.2K
C741 3.3/50
C742 .1
C740 .1
R763 2.2K
R760 3.9K
R761 10K
C738 1000p
C739 4700p
R762 2.2K
R770 0
Q801
R803 2.7K
R804 1.5K
R802 1K
D801
C801 100p
R801 75
Q802
R805 2.2K
R806 2.2K
Q803
R807 10K
Q801-Q803 2SC2712(Y)-W
GND
SIZE
HCKO
RCK1
HPS
VPS
DISP
STILL
HD
VD
POP
SDSW
12V
GND
PIP_5V
GND
R707 1K
R706 1K
R705 1K
R704 1K
R768 1K
R703 1K
R702 1K
R701 18 (2W)
C701 100/16
C702 470/16
IC701 UPC2405HF
COMP.VIDEO
PIP/POP ON
1.5Vp-p (H)
GND
Ys
B_OUT
G_OUT
R_OUT
1 2 3 4 5 6 7 8 9 10

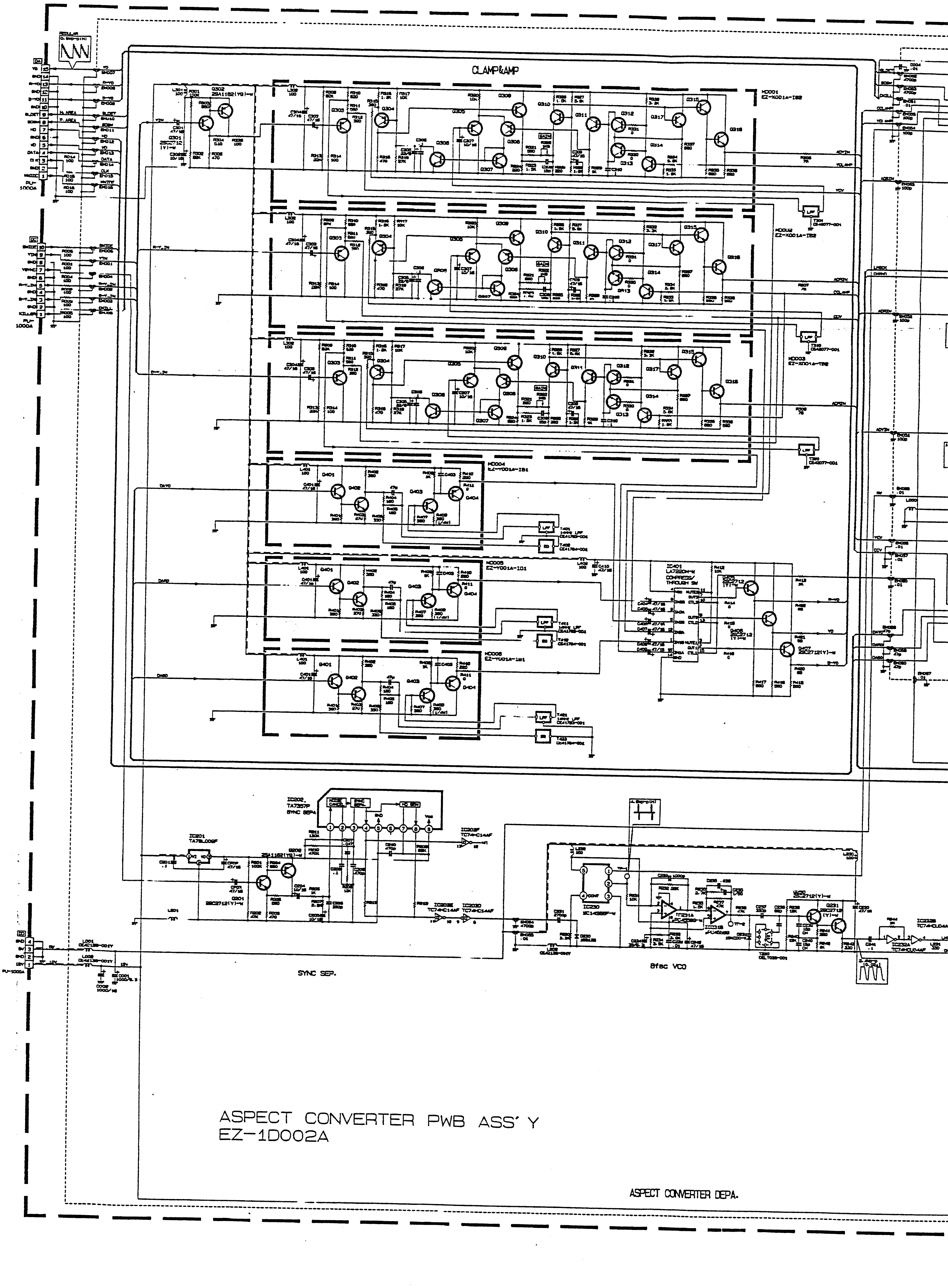

R732 1K
L703 220
Q705
2SA1162(YG)-W
R-Y LEVEL CONT
R730 1K
R731 1K
C719 1/50 BP
L701 220
R725 10KB
R724 1K
C717 220p
R726 3.9K
L702 220
R728 5.6K
R727 1K
C718 220p
R729 22K
Q706
2SA1162(YG)-W
C720 1/50 BP
R735 1K
Q710
2SC2712(Y)-W
C725 4700p
R742 2.2K
R743 1.8K
R747 1K
0.6Vp-p (H)
0.6Vp-p (H)
1.2Vp-p (H)
TP-BY1
TP-RY1
TP-Y1
Q707
2SC2712(Y)-W
R733 1K
C721 82p
R734 3.3K
C722 1/50
EM917 220p
EM916 220p
EM918 220p
EM901 2200p
C901 47/16
C902 .1
K104 CE41790-001
K105 CE41790-001
AVcc VRB VRM VRT VMON VIN Y AGND DGND
IC901
UPC661G A/D
DVcc
Pc1
L906 CE41790-001
D10 D11 D12 D13 D14 D15
Q901
R901 5.6K
R902 6.8K
R916 4.7K
C903 .1
C904 47/16
C912 1500p
Q901-Q905
2SC2712(Y)-W
Q902
R903 5.6K
R904 22K
R905 10K
EM915 2200p
R906 2.2K
C911 100p
R907 22K
R908 10K
Q903
EM914 2200p
EM902 2200p
EM919 2200p
EM903 2200p
EM904 2200p
EM905 220p
C905 .1
C906 47/16
EM906 2200p
EM907 2200p
EM908 22p
FC1 FC0 FDE SFDIS MFDIS SFC MFC N/P GND D15 D14 D13 D12 D11 D10 ADCK BSW RSW YSW
HPS VPS SIZE SVS SHS VDD SOSCI SOSCO GND DISP STILL BLANK DOB5
IC902
UPD42272AGF
PIP/POP CONTROL
TEST0 TEST1 TEST2 MVS MHS VDD RCK MOSCI MOSCO GND YDACK RDACK BDACK
DOB4 DOB3 DOB2 DOB1 DOB0 DOR5 DOR4 DOR3 GND DOR2 VDD DOR1 DOR0 DOY5 DOY4 DOY3 DOY2 DOY1 DOY0
C910 .1
C909 47/16
T902 CE42080-001
Q904
R917 10K
L901 8.2
TP-RCK
R909 22K
R910 10K
C908 .1
EM913 2200p
L903 4.7
L902 4.7
R911 22K
C907 .1
EM912 2200p
Q905
1.6Vp-p (H)
T901 CE42079-001
R915 10K
TP-WCK
2.5Vp-p (H)
R914 GRZ0099-102
R913 GRZ0099-102
R912 GRZ0099-102
EM909 22p
EM910 22p
EM911 22p
R811 680
TP-BY2
Q804
L801 120
R808 2.2K
R809 10K
C803 150p
R812 1K
R810 680
C802 47/16
Q805
R1228 5.6K
C1221 47/16
R816 8.2K
R817 3.3K
R818 2.2K
R827 1K
Q806
R826 680
L802 120
TP-RY2
R824 2.2K
R825 10K
C809 150p
TP-Y2
Q804-Q806
2SC2712(Y)-W
C805 47/16
R814 1K (1/4W)
R822 1K (1/4W)
R821 1.8K
R829 1K (1/4W)
R832 1K (1/4W)
C812 47/16
R833 0
R815 75
C806 47/16
R813 1K
C804 68p
Q810
B_OUT
R823 75
C808 47/16
Q809
G_OUT
R819 1K
C807 68p
R820 2.2K
R830 75
C811 47/16
R_OUT
Q808
R828 1K
C810 68p
Q807
R831 2.2K
LPF
T801
MATRIX
Q807-Q810
2SA1162(YG)-W

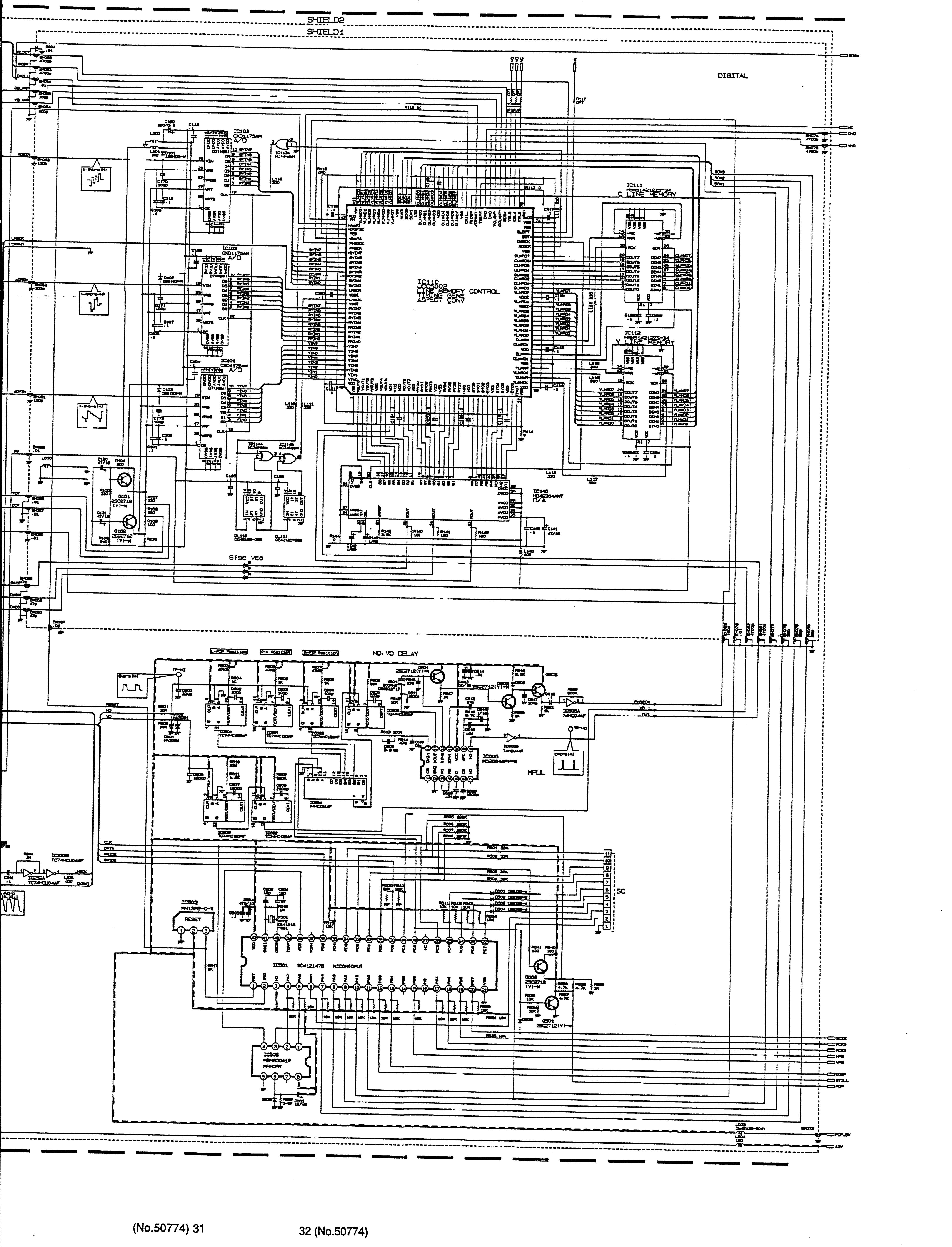
EZ-1D002A

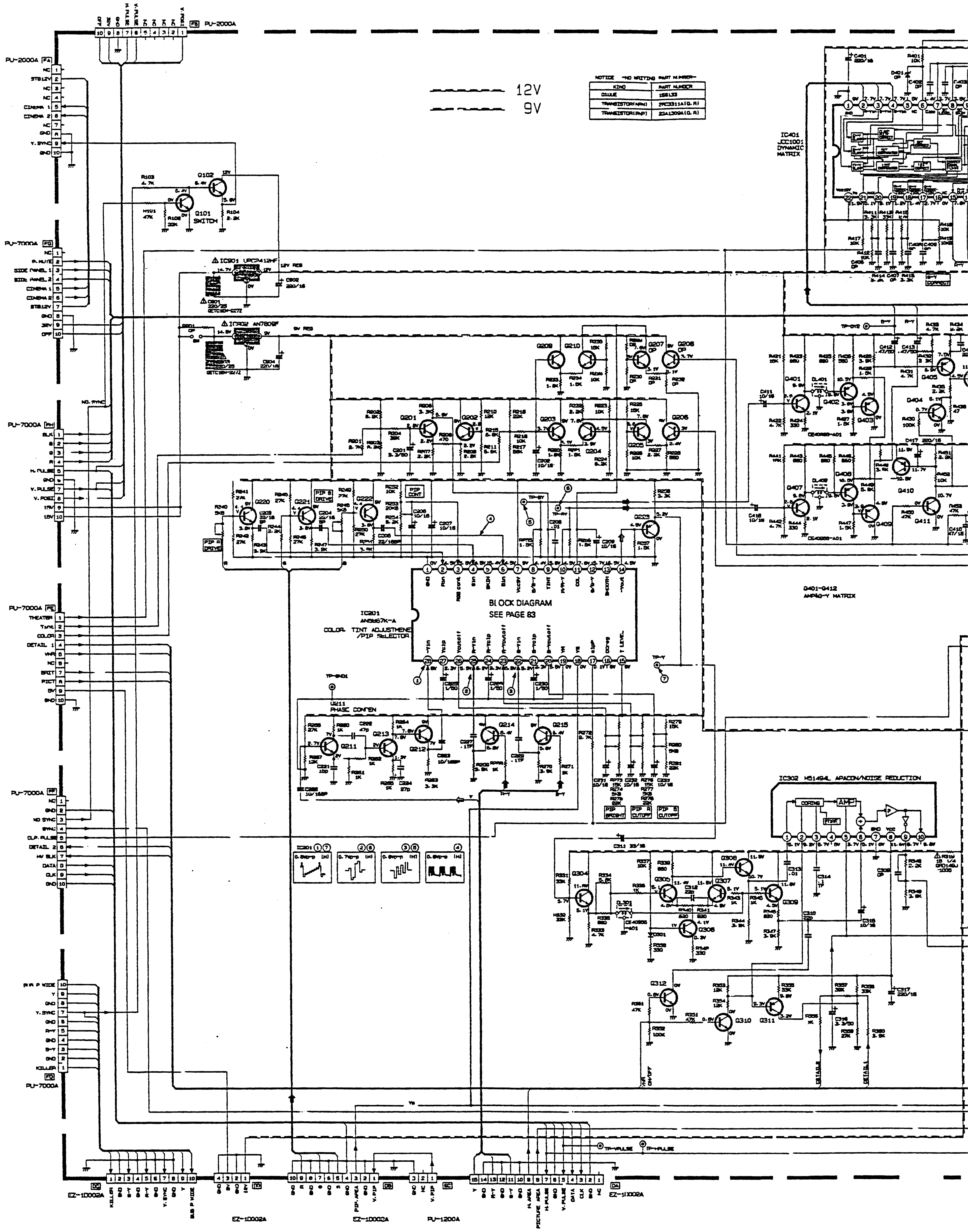
ASPECT CONVERTER PWB ASS'Y

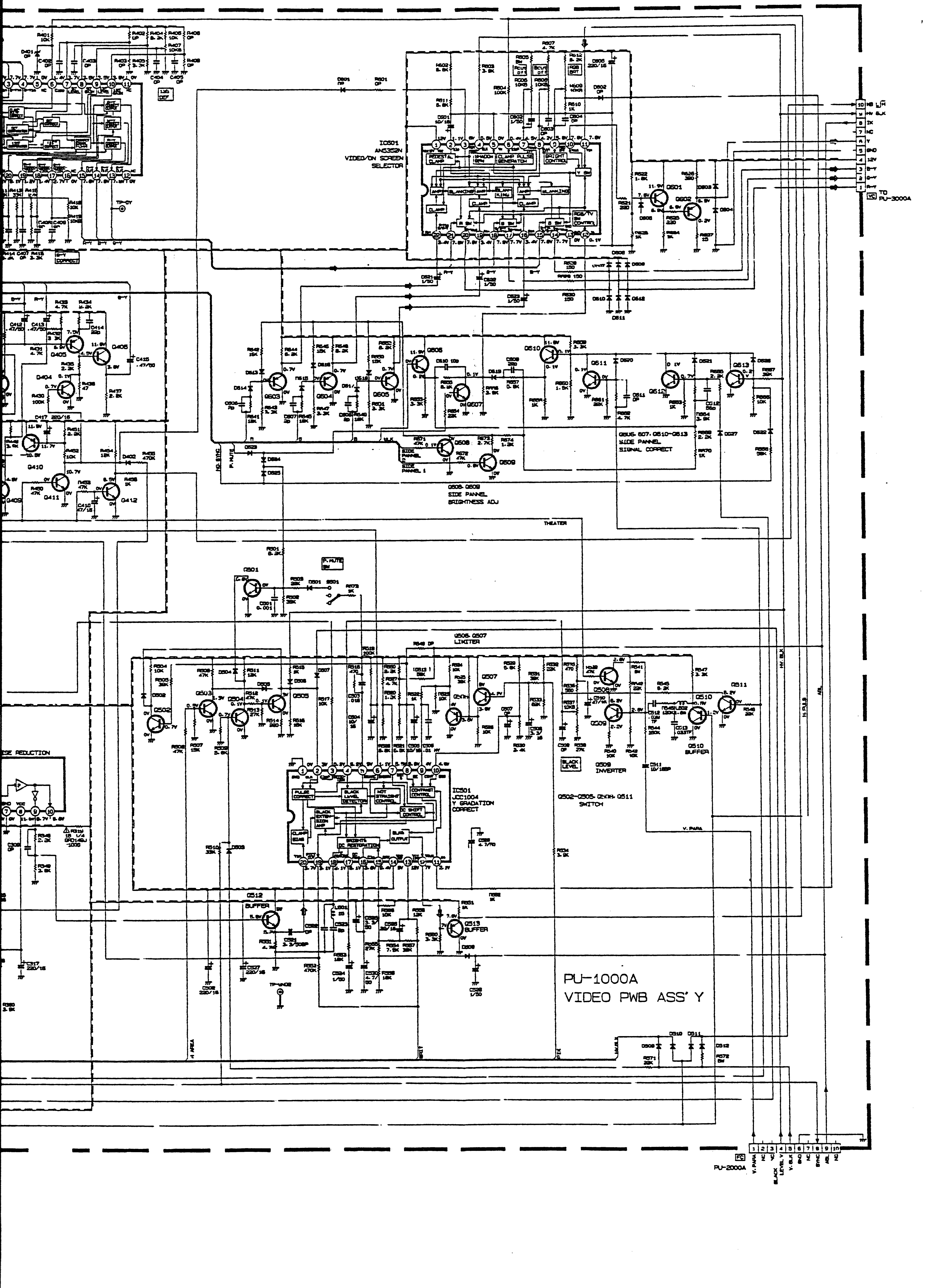
PIP/POP DEPA.

ASPECT CONVERTER PWB CIRCUIT DIAGRAMS-1 (EZ-1D002A)

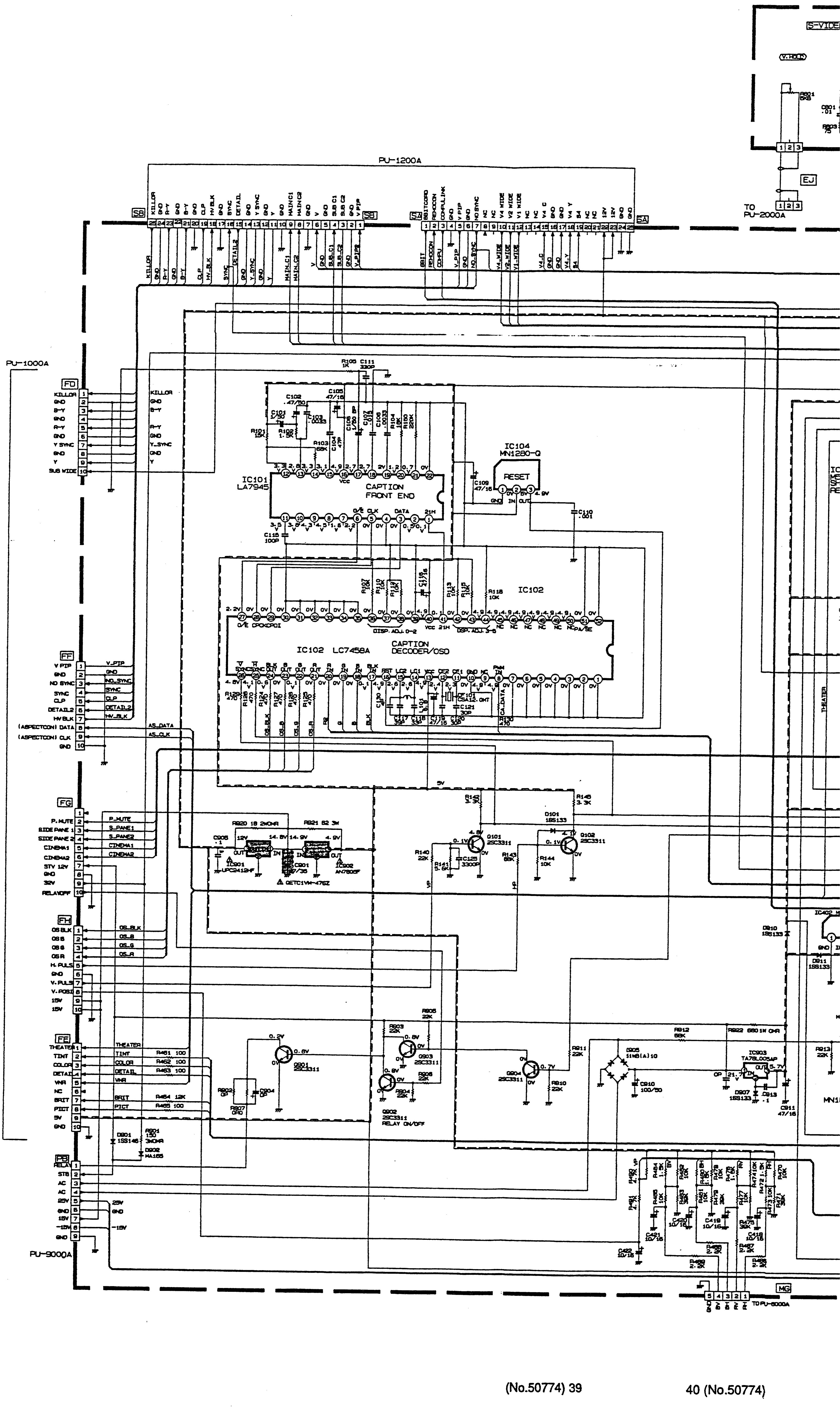

CLAMP&AMP
HC001
EZ-X001A-IB2
HC002
EZ-X001A-IB2
HC003
EZ-X001A-IB2
HC004
EZ-Y001A-IB1
HC005
EZ-Y001A-IB1
HC006
EZ-Y001A-IB1
IC401
LA7220M-W
COMPRESS/
THROUGH SW
IC202
TA7357P
SYNC SEPA
IC201
TA78L005F
IC230
BC14566F-W
IC231A
IC203F
TC74HC14AF
PU-1000A
SYNC SEP.
8fsc VCO
ASPECT CONVERTER PWB ASS' Y
EZ-1D002A
ASPECT CONVERTER DEPA.

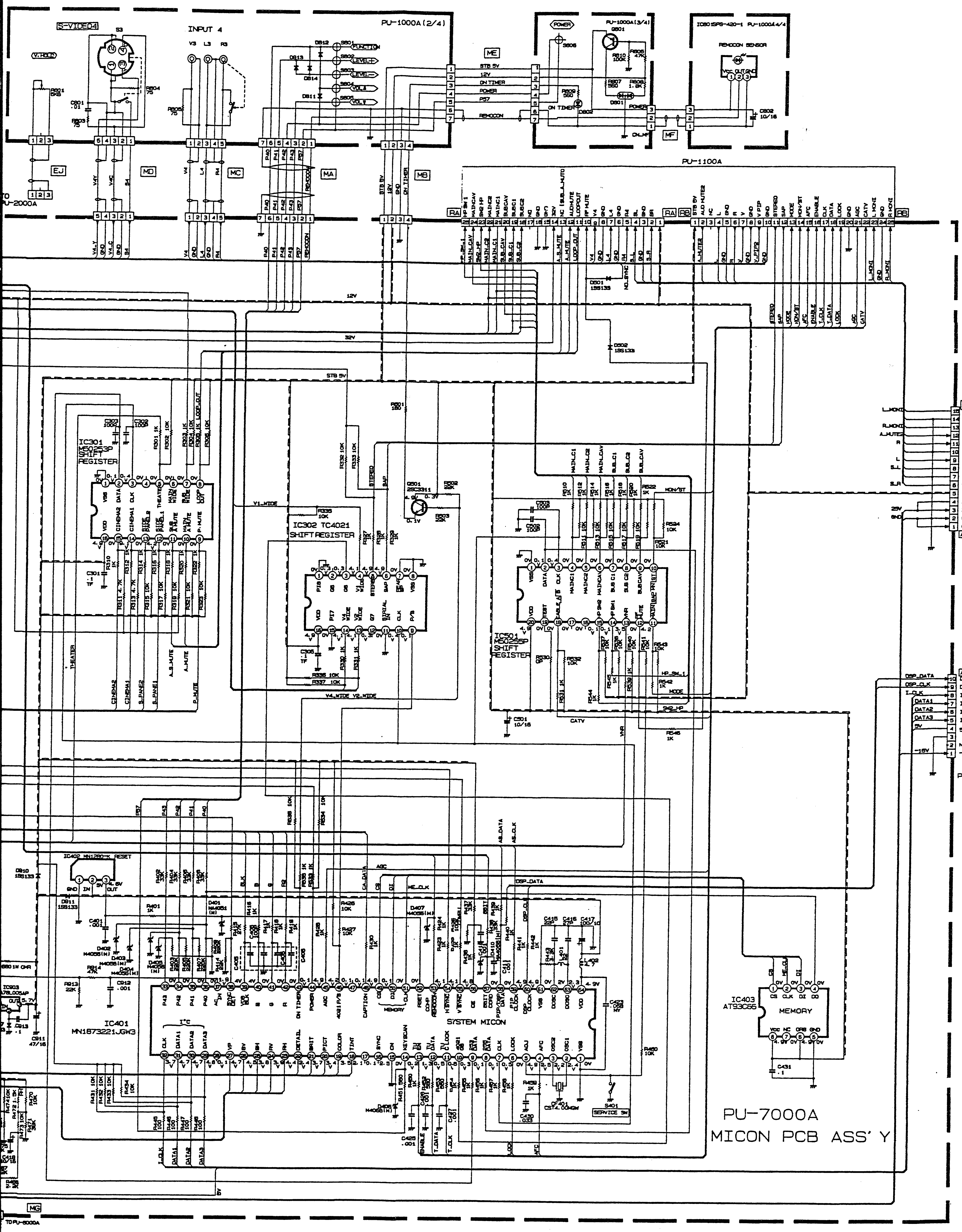

SHIELD2
SHIELD1
DIGITAL
IC103
CXD1175AM
A/D
IC102
CXD1175AM
A/D
IC101
CXD1175AM
A/D
IC110
JCC5002
LINE MEMORY CONTROL
TIMING GENE
ASPECT CONV
IC111
C LINE MEMORY
IC112
Y LINE MEMORY
IC140
D/A
6fsc VCO
HD, VD DELAY
HPLL
SC
IC502
RESET
IC501
SC4121478
MICOM(CPU)
IC503
MEMORY


PU-2000A
PU-7000A
12V
9V
IC401 JCC1001 DYNAMIC MATRIX
IC901 UPC2412HF
IC902 AN7809F
12V REG
9V REG
Q101 SWITCH
Q102
IC201 AN5867K-A COLOR, TINT ADJUSTMENT /PIP SELECTOR
BLOCK DIAGRAM SEE PAGE 63
Q211 PHASE CONTEN
PIP B DRIVE
PIP R DRIVE
PIP CONT
PIP BRIGHT
PIP R CUTOFF
PIP B CUTOFF
Q401-Q412 AMP&G-Y MATRIX
IC302 M51494L APACON/NOISE REDUCTION
CORING
AMP
TP-GND1
TP-RY
TP-BY
TP-Y
TP-VPULSE
TP-HPULSE
EZ-1D002A
EZ-10002A
PU-1200A
EZ-1J002A
NOTICE *NO WRITING PART NUMBER*
KIND
PART NUMBER
DIODE
1SS133
TRANSISTOR(NPN)
2SC3311A(Q,R)
TRANSISTOR(PNP)
2SA1309A(Q,R)


IC501
AN5352N
VIDEO/ON SCREEN
SELECTOR
TO
PU-3000A
Q506, 607, Q510-Q513
SIDE PANNEL
SIGNAL CORRECT
Q508, Q509
SIDE PANNEL
BRIGHTNESS ADJ
THEATER
P.MUTE
SW
Q506, Q507
LIMITER
IC501
Y GRADATION
CORRECT
Q509
INVERTER
Q510
BUFFER
Q502-Q505, Q508, Q511
SWITCH
BLACK
LEVEL
Q512
BUFFER
Q513
BUFFER
TP-WN02
PU-1000A
VIDEO PWB ASS'Y
V.PARA
BLACK LEVEL V
V.BLK
GND
SYNC
ABL
NC
PU-2000A
TP-GY
R-Y
B-Y
G-Y
NR SYNC
P. MUTE
V. PARA
H. BLK
ABL
H.PULS

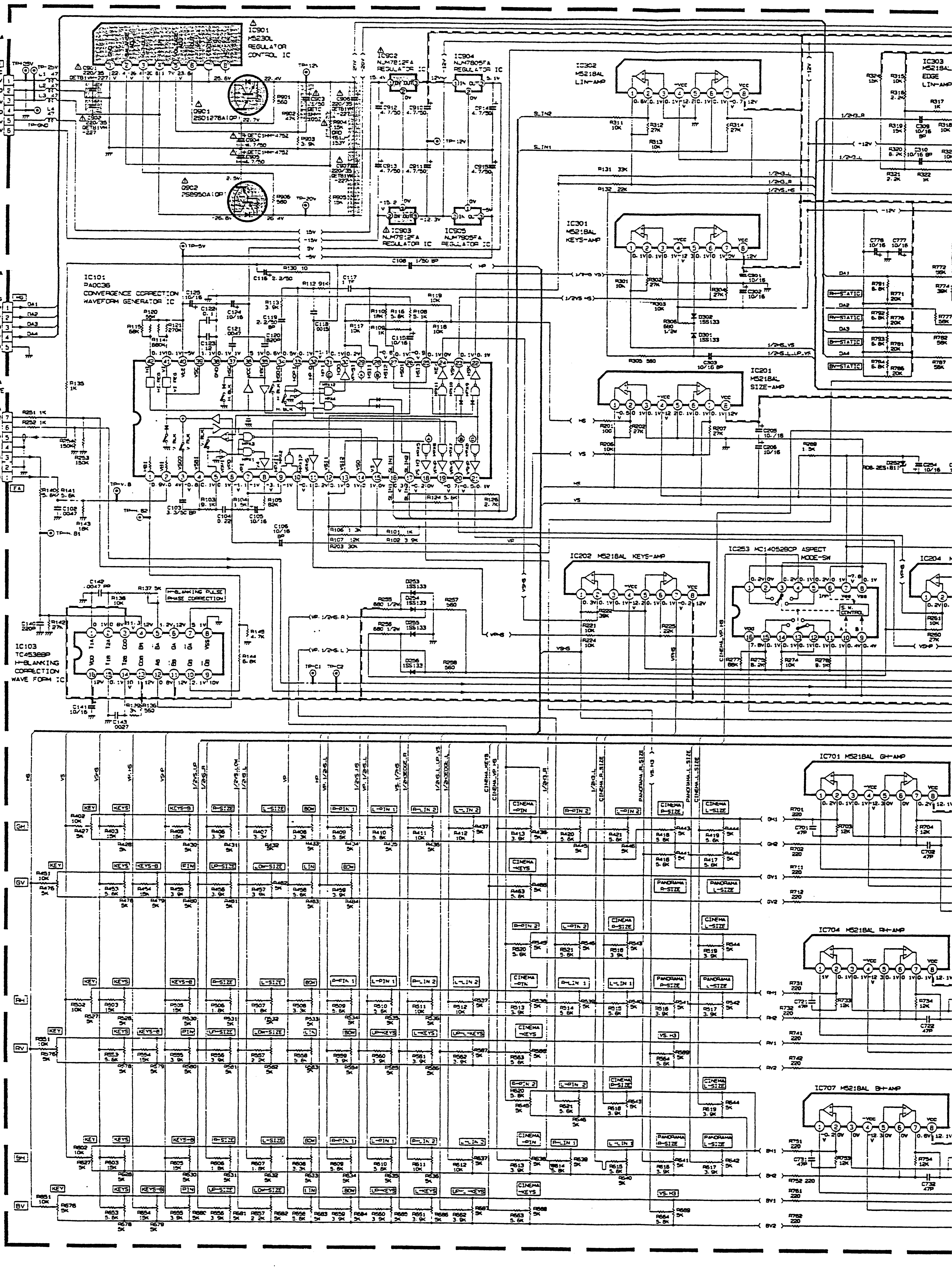
MICROCOMPUTER (MICON) PWB CIRCUIT DIAGRAMS (PU-7000A)

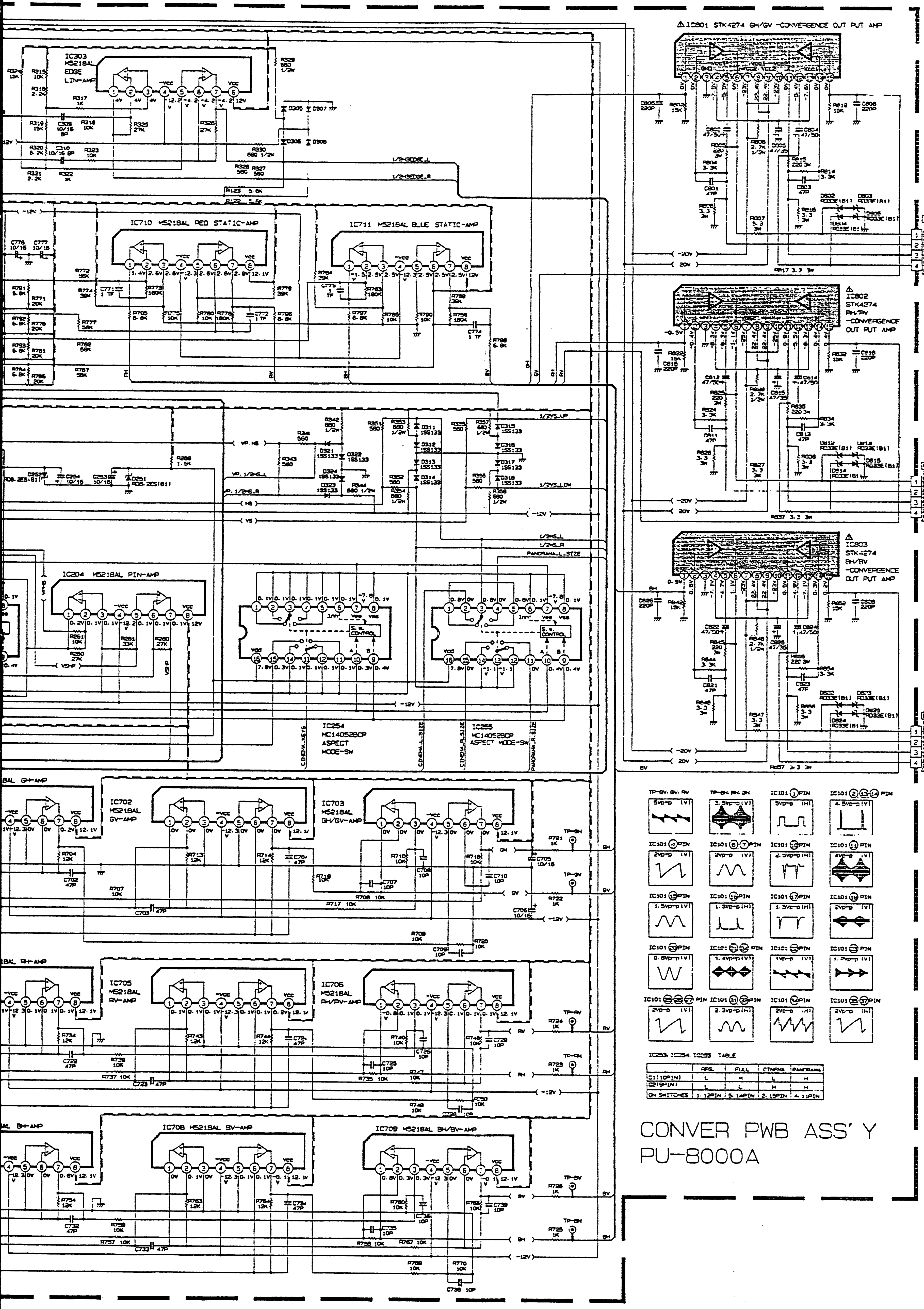

PU-1200A
PU-1000A
PU-9000A
TO PU-2000A
TO PU-6000A
S-VIDEO
V.HOLD
EJ
SB
SA
FD
FF
FG
FH
FE
PB
MG
IC101 LA7945 CAPTION FRONT END
IC102 LC7458A CAPTION DECODER/OSD
IC104 MN1280-Q RESET
IC901 UPC2412HF
IC902 AN7805F
IC903 TA78L005AP
Q101 2SC3311
Q102 2SC3311
Q901 2SC3311
Q902 2SC3311 RELAY ON/OFF
Q903 2SC3311
Q904 2SC3311
D101 1SS133
D901 1SS146
D902 MA165
D905 S1WB(A)10
D907 1SS133
D910 1SS133
D911 1SS133
QETC1VM-476Z
KILLOR
R-Y
B-Y
GND
Y SYNC
Y
SUB WIDE
V PIP
NO SYNC
SYNC
CLP
DETAIL2
HV BLK
(ASPECTCON) DATA
(ASPECTCON) CLK
P. MUTE
SIDE PANE 1
SIDE PANE 2
CINEMA1
CINEMA2
STV 12V
32V
RELAYOFF
OS BLK
OS B
OS G
OS R
H. PULS
V. PULS
V. POSI
15V
THEATER
TINT
COLOR
DETAIL
VNR
NC
BRIT
PICT
5V
RELAY
STB
AC
25V
-15V
AS_DATA
AS_CLK
5V



PU-7000A
MICON PCB ASS' Y
PU-1000A (2/4)
PU-1000A (3/4)
PU-1000A 4/4
PU-1100A
PU-6000A
TO PU-2000A
TO PU-6000A
S-VIDEO4
INPUT 4
V3 L3 R3
S801 FUNCTION
S802 LEVEL+
S803 LEVEL-
S804 VOL+
S805 VOL-
POWER
S806
Q801
REMOCON SENSOR
STB 5V
12V
ON TIMER
POWER
P57
REMOCON
EJ
MD
MC
MA
MB
ME
MF
MG
RA
RB
AA
AB
IC301 M50253P SHIFT REGISTER
IC302 TC4021 SHIFTREGISTER
IC501 M50255P SHIFT REGISTER
Q501 2SC3311
IC401 MN1873221JGW3
SYSTEM MICON
I²C
IC402 MN1280-K RESET
IC403 AT93C56 MEMORY
CST401 CST4.00MGW
S401 SERVICE SW
D501 1SS133
D502 1SS133
L_MONI
R_MONI
AUDMUTE2
DSP_DATA
DSP_CLK
I²CLK
I²CDATA1
I²CDATA2
I²CDATA3
5V
-15V
25V
12V
32V
CATV
VNR
AFC
T_CLK
DATA1
DATA2
DATA3

CONVER PWB CIRCUIT DIAGRAMS (PU-8000A)


TO PU-8000A POWER PWB
TO PU-7000A MICOM PWB
TO PU-2000A DEF. DRIVE PWB
IC901 M5230L REGULATOR CONTROL IC
Q901 2SD1276A(Q)P
Q902 2SB950A(Q)P
IC902 NJM7812FA REGULATOR IC
IC904 NJM7805FA REGULATOR IC
IC903 NJM7912FA REGULATOR IC
IC905 NJM7905FA REGULATOR IC
IC302 M5218AL LIN-AMP
IC303 M5218AL EDGE LIN-AMP
IC301 M5218AL KEYS-AMP
IC101 PA0036 CONVERGENCE CORRECTION WAVEFORM GENERATOR IC
IC201 M5218AL SIZE-AMP
IC103 TC4538BP H-BLANKING CORRECTION WAVE FORM IC
H-BLANKING PULSE PHASE CORRECTION
IC202 M5218AL KEYS-AMP
IC253 MC14052BCP ASPECT MODE-SW
IC204
IC701 M5218AL GH-AMP
IC704 M5218AL RH-AMP
IC707 M5218AL BH-AMP
RH-STATIC
RV-STATIC
BH-STATIC
BV-STATIC
GH
GV
RH
RV
BH
BV

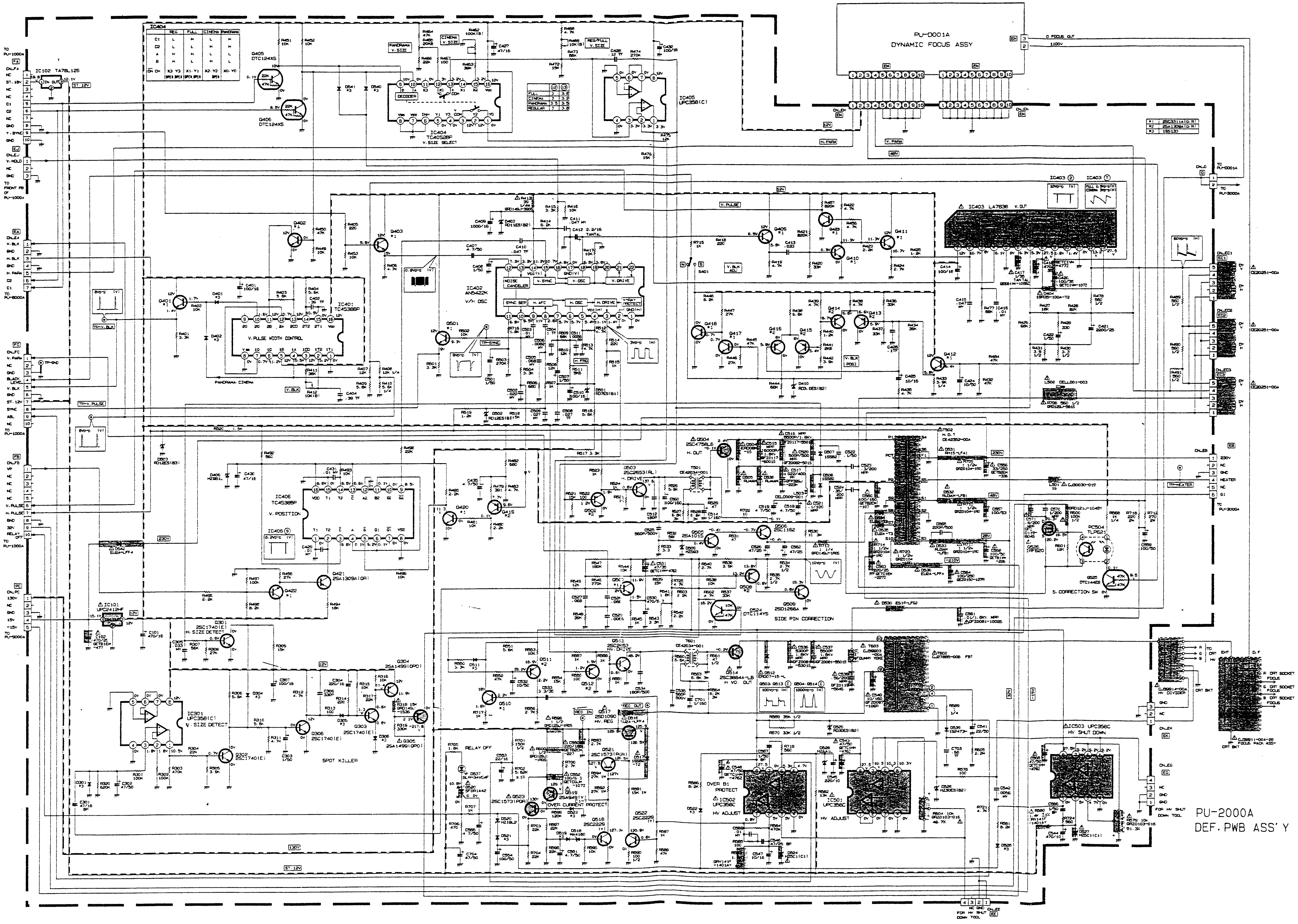

IC303 M5218AL EDGE LIN-AMP
⚠ IC801 STK4274 GH/GV -CONVERGENCE OUT PUT AMP
IC710 M5218AL RED STATIC-AMP
IC711 M5218AL BLUE STATIC-AMP
⚠ IC802 STK4274 RH/RV -CONVERGENCE OUT PUT AMP
IC204 M5218AL PIN-AMP
IC254 MC14052BCP ASPECT MODE-SW
IC255 MC14052BCP ASPECT MODE-SW
⚠ IC803 STK4274 BH/BV -CONVERGENCE OUT PUT AMP
IC702 M5218AL GV-AMP
IC703 M5218AL GH/GV-AMP
IC705 M5218AL RV-AMP
IC706 M5218AL RH/RV-AMP
IC708 M5218AL BV-AMP
IC709 M5218AL BH/BV-AMP
CONVER. YOKE

IC253. IC254. IC255 TABLE

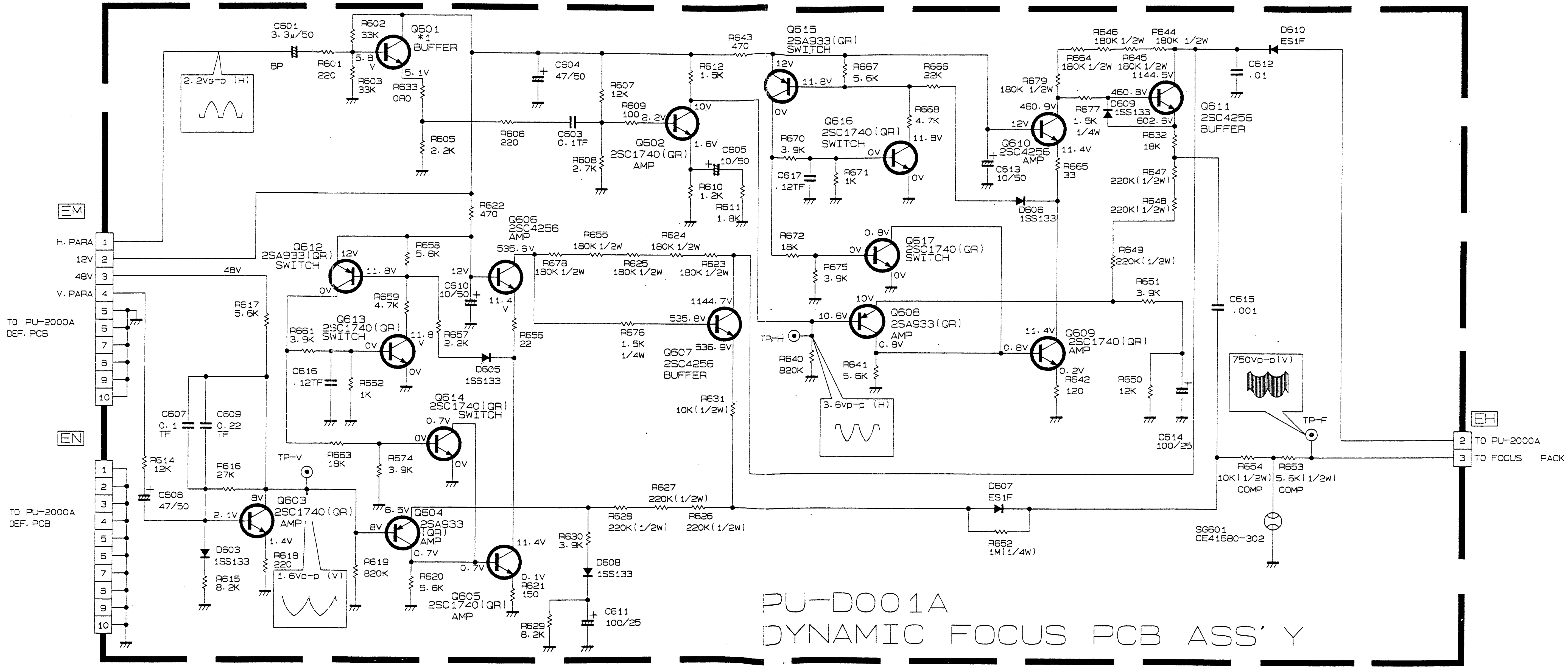
	RFG.	FULL	CINEMA	PANORAMA
C1(10PIN)	L	H	L	H
C2(9PIN)	L	L	H	H
ON SWITCHES	1. 12PIN	5. 14PIN	2. 15PIN	4. 11PIN

CONVER PWB ASS'Y
PU-8000A

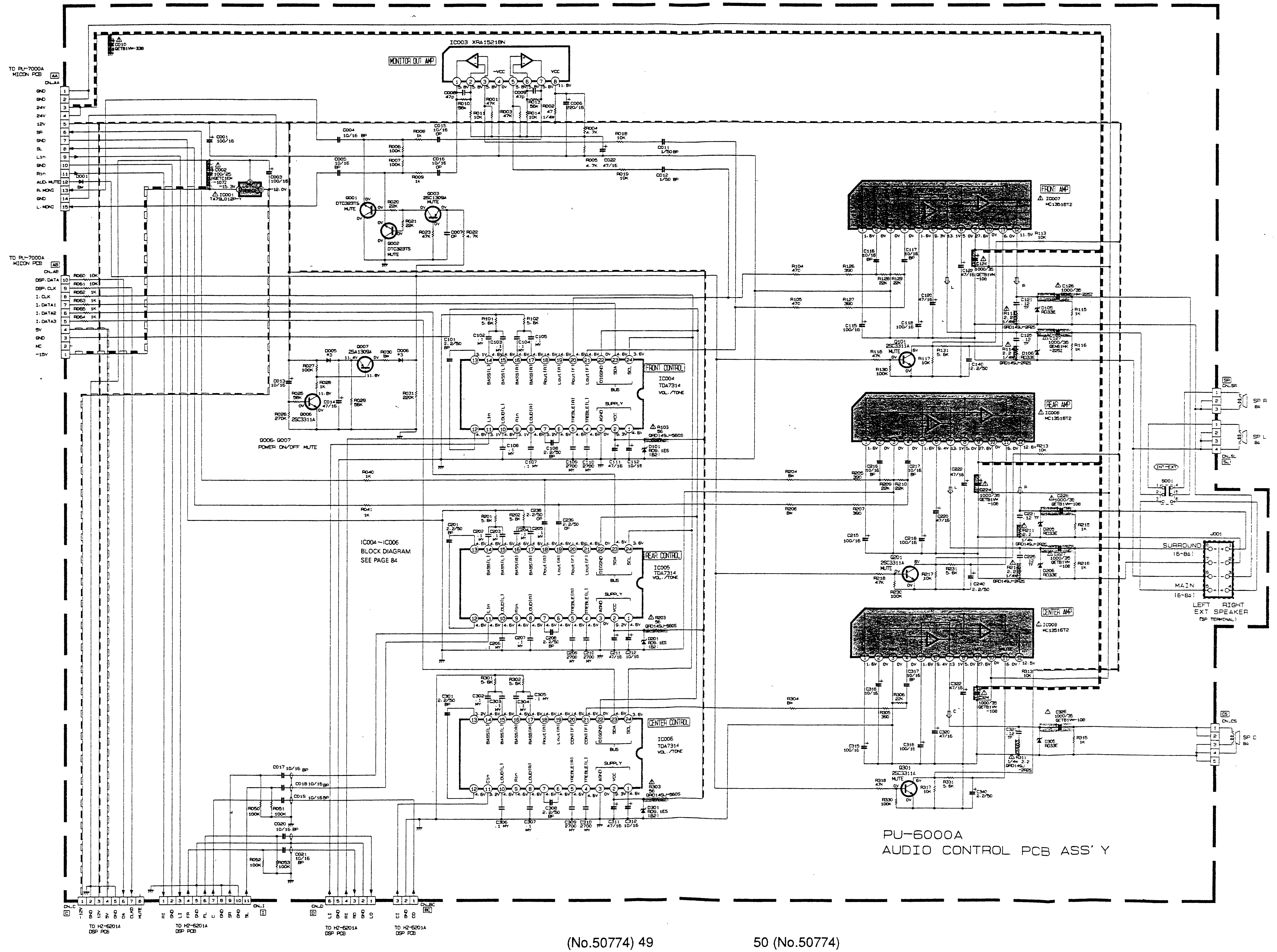
DEF. PWB CIRCUIT DIAGRAMS (PU-2000A)


PU-D001A
DYNAMIC FOCUS ASSY
IC404 TC4052BP V.SIZE SELECT
DECODER
PANORAMA V.SIZE
CINEMA V.SIZE
REG/FULL V.SIZE
IC405 UPC358(C)
IC102 TA78L12S
Q405 DTC124XS
Q406 DTC124XS
IC403 LA7838 V.OUT
IC402 AN5422K V/H OSC
NOISE CANCELER
V.SYNC
V.OSC
V.DRIVE
SYNC SEP
H.AFC
H.OSC
H.DRIVE
IC401 TC4538BP
V.PULSE WIDTH CONTROL
PANORAMA CINEMA
IC406 TC4538BP
V.POSITION
Q421 2SA1309A(QR)
IC101 UPC2412HF
IC301 UPC358(C) V.SIZE DETECT
Q301 2SC1740(E) H.SIZE DETECT
Q302 2SC1740(E)
Q303 2SC1740(E)
Q304 2SA1499(QPQ)
Q305 2SA1499(QPQ)
SPOT KILLER
Q504 2SC4758LB H.OUT
Q503 2SC2653(RL) H.DRIVE
Q506 2SC1162
Q505 2SA1015
Q507 2SC2229
Q509 2SD1266A
Q524 DTC114YS
SIDE PIN CORRECTION
T502 H.D.T
Q525 DTC144ES
S.CORRECTION SW
PC504 TLP621
Q513 2SC2625 HV.DRIVE
Q514 2SC3684A-LB H.VD OUT
T602 FBT
RELAY OFF
Q523 2SC1573(PQR)
Q515 2SA949(Y)
OVER CURRENT PROTECT
Q518 2SC2229
Q522 2SC2229
Q521 2SC1573(PQR)
Q517 2SD1090 HV.REG
IC502 UPC358C
OVER B1 PROTECT
HV ADJUST
IC501 UPC358C
HV ADJUST
IC503 UPC358C
HV SHUT DOWN
FOR HV SHUT DOWN TOOL
HV DIVIDER
CRT BKT
TO PU-1000A
TO PU-3000A
TO PU-D001A
TO FRONT PB OF PU-1000A
PU-2000A
DEF.PWB ASS'Y

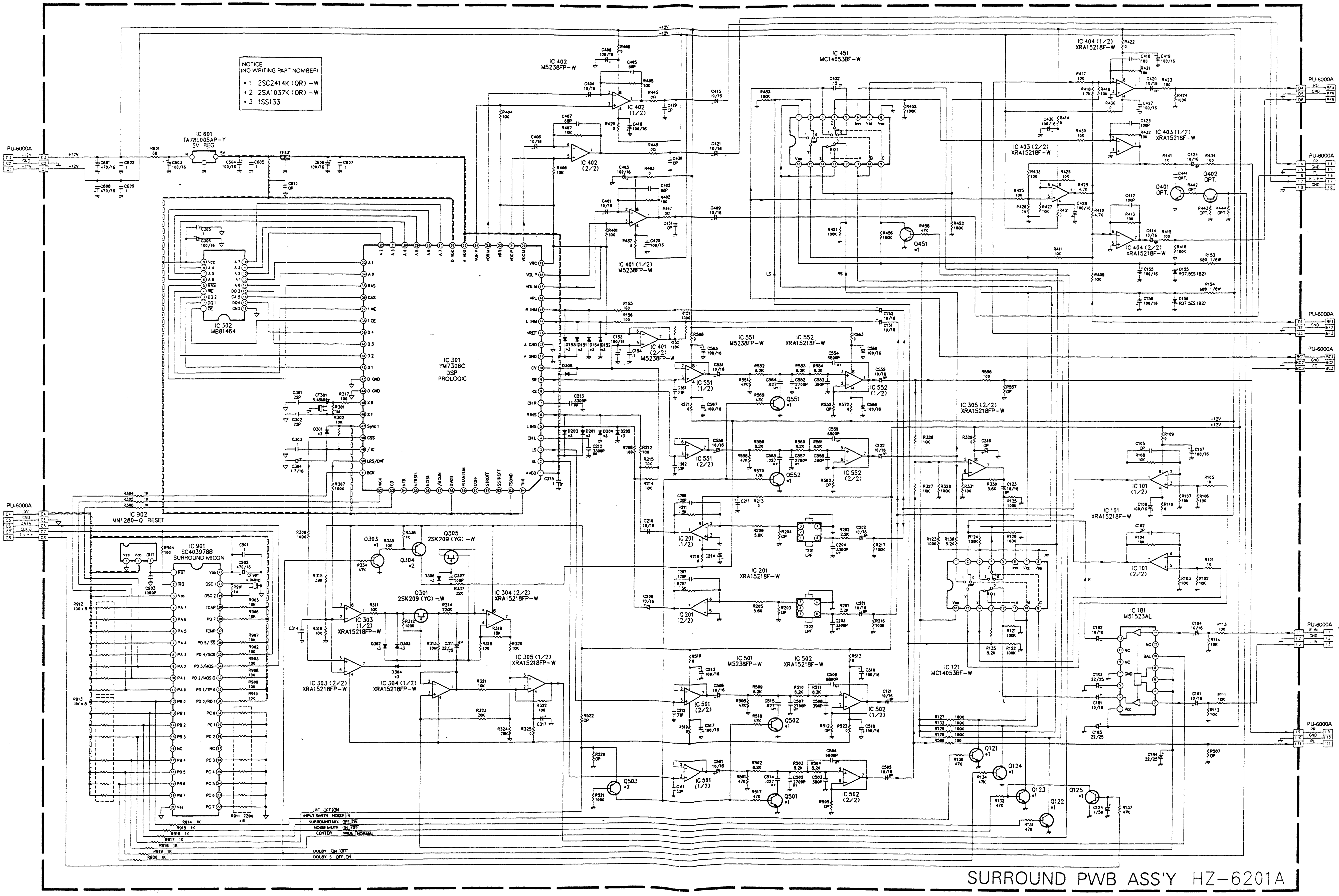
DYNAMIC FOCUS PWB CIRCUIT DIAGRAMS (PU-D001A)


PU-D001A
DYNAMIC FOCUS PCB ASS' Y
EM
H. PARA
12V
48V
V. PARA
TO PU-2000A DEF. PCB
EN
TO PU-2000A DEF. PCB
EH
TO PU-2000A
TO FOCUS PACK
2.2Vp-p (H)
1.6Vp-p (V)
3.6Vp-p (H)
750Vp-p (V)
TP-V
TP-H
TP-F
C601 3.3μ/50 BP
R601 220
R602 33K
R603 33K
Q601 *1 BUFFER
R633 0R0
R605 2.2K
R606 220
C603 0.1TF
C604 47/50
R607 12K
R608 2.7K
R609 100
Q602 2SC1740(QR) AMP
R612 1.5K
C605 10/50
R610 1.2K
R611 1.8K
R643 470
Q615 2SA933(QR) SWITCH
R667 5.6K
R666 22K
R668 4.7K
Q616 2SC1740(QR) SWITCH
R670 3.9K
C617 .12TF
R671 1K
R646 180K 1/2W
R644 180K 1/2W
R664 180K 1/2W
R645 180K 1/2W
R679 180K 1/2W
R677 1.5K 1/4W
D609 1SS133
Q610 2SC4256 AMP
Q611 2SC4256 BUFFER
C613 10/50
R665 33
R632 18K
R647 220K(1/2W)
R648 220K(1/2W)
R649 220K(1/2W)
R651 3.9K
D606 1SS133
D610 ES1F
C612 .01
C615 .001
R622 470
Q606 2SC4256 AMP
Q612 2SA933(QR) SWITCH
R658 5.6K
R655 180K 1/2W
R624 180K 1/2W
R678 180K 1/2W
R625 180K 1/2W
R623 180K 1/2W
C610 10/50
R659 4.7K
Q613 2SC1740(QR) SWITCH
R661 3.9K
C616 .12TF
R662 1K
R657 2.2K
D605 1SS133
R656 22
R676 1.5K 1/4W
Q607 2SC4256 BUFFER
R631 10K(1/2W)
R672 18K
R675 3.9K
Q617 2SC1740(QR) SWITCH
Q608 2SA933(QR) AMP
R640 820K
R641 5.6K
Q609 2SC1740(QR) AMP
R642 120
R650 12K
C614 100/25
R617 5.6K
C607 0.1 TF
C609 0.22 TF
R614 12K
R616 27K
C608 47/50
Q603 2SC1740(QR) AMP
D603 1SS133
R615 8.2K
R618 220
Q614 2SC1740(QR) SWITCH
R663 18K
R674 3.9K
Q604 2SA933(QR) AMP
R619 820K
R620 5.6K
Q605 2SC1740(QR) AMP
R621 150
R629 8.2K
R630 3.9K
D608 1SS133
C611 100/25
R627 220K(1/2W)
R628 220K(1/2W)
R626 220K(1/2W)
D607 ES1F
R652 1M(1/4W)
R654 10K(1/2W) COMP
R653 5.6K(1/2W) COMP
SG601 CE41680-302

AUDIO PWB CIRCUIT DIAGRAMS (PU-6000A)


TO PU-7000A
MICON PCB
AA
CN_AA
GND
GND
24V
24V
12V
SR
GND
SL
Lin
GND
Rin
AUD. MUTE
R. MONI
GND
L. MONI
C010
QETB1VM-338
IC003 XRA15218N
MONITOR OUT AMP
C001
100/16
C002
100/25
QETC1EM
-1072
IC001
TA79L012P-Y
C003
100/16
-15.3V
-12.0V
D001
Q001
DTC323TS
MUTE
Q002
DTC323TS
MUTE
Q003
2SC1309A
MUTE
TO PU-7000A
MICON PCB
AB
CN_AB
DSP. DATA
DSP. CLK
I. CLK
I. DATA1
I. DATA2
I. DATA3
5V
GND
NC
-15V
R060 10K
R061 10K
R062 1K
R063 1K
R065 1K
R064 1K
Q006
2SC3311A
Q007
2SA1309A
Q006, Q007
POWER ON/OFF MUTE
IC004~IC006
BLOCK DIAGRAM
SEE PAGE 84
FRONT CONTROL
IC004
TDA7314
VOL./TONE
REAR CONTROL
IC005
TDA7314
VOL./TONE
CENTER CONTROL
IC006
TDA7314
VOL./TONE
BUS
SUPPLY
FRONT AMP
IC007
MC13516T2
REAR AMP
IC008
MC13516T2
CENTER AMP
IC009
MC13516T2
Q101
2SC3311A
MUTE
Q201
2SC3311A
MUTE
Q301
2SC3311A
MUTE
SR
CN_SR
SP R
8Ω
SP L
8Ω
CN_SL
SL
INT-EXT
S001
J001
SURROUND
(6~8Ω)
MAIN
(6~8Ω)
LEFT RIGHT
EXT SPEAKER
(SP TERMINAL)
CS
CN_CS
SP C
8Ω
PU-6000A
AUDIO CONTROL PCB ASS'Y
CN_C
C
-12V
GND
12V
5V
GND
DA
CLKD
MUTE
TO HZ-6201A
DSP PCB
RI
GND
LI
FR
GND
FL
C
GND
SR
GND
SL
CN_I
I
TO HZ-6201A
DSP PCB
CN_D
D
LI
GND
RI
RO
GND
LO
TO HZ-6201A
DSP PCB
CI
GND
CO
CN_BC
BC
TO HZ-6201A
DSP PCB

SURROUND PWB CIRCUIT DIAGRAMS (HZ-6201A)


NOTICE
(NO WRITING PART NUMBER)
*1 2SC2414K (QR) -W
*2 2SA1037K (QR) -W
*3 1SS133
IC 601 TA78L005AP-Y 5V REG
IC 402 M5238FP-W
IC 401 M5238FP-W
IC 451 MC14053BF-W
IC 404 XRA15218F-W
IC 403 XRA15218F-W
IC 302 MB81464
IC 301 YM7306C DSP PROLOGIC
IC 551 M5238FP-W
IC 552 XRA15218F-W
IC 305 XRA15218F-W
IC 201 XRA15218F-W
IC 101 XRA15218F-W
IC 121 MC14053BF-W
IC 181 M51523AL
IC 501 M5238FP-W
IC 502 XRA15218F-W
IC 902 MN1280-Q RESET
IC 901 SC403978B SURROUND MICON
IC 303 XRA15218FP-W
IC 304 XRA15218FP-W
Q305 2SK209 (YG) -W
Q301 2SK209 (YG) -W
Q401 OPT.
Q402 OPT.
PU-6000A
LPF OFF ON
INPUT SWITCH NOISE IN
SURROUND MIX OFF ON
NOISE MUTE ON OFF
CENTER WIDE NORMAL
DOLBY ON OFF
DOLBY S OFF ON

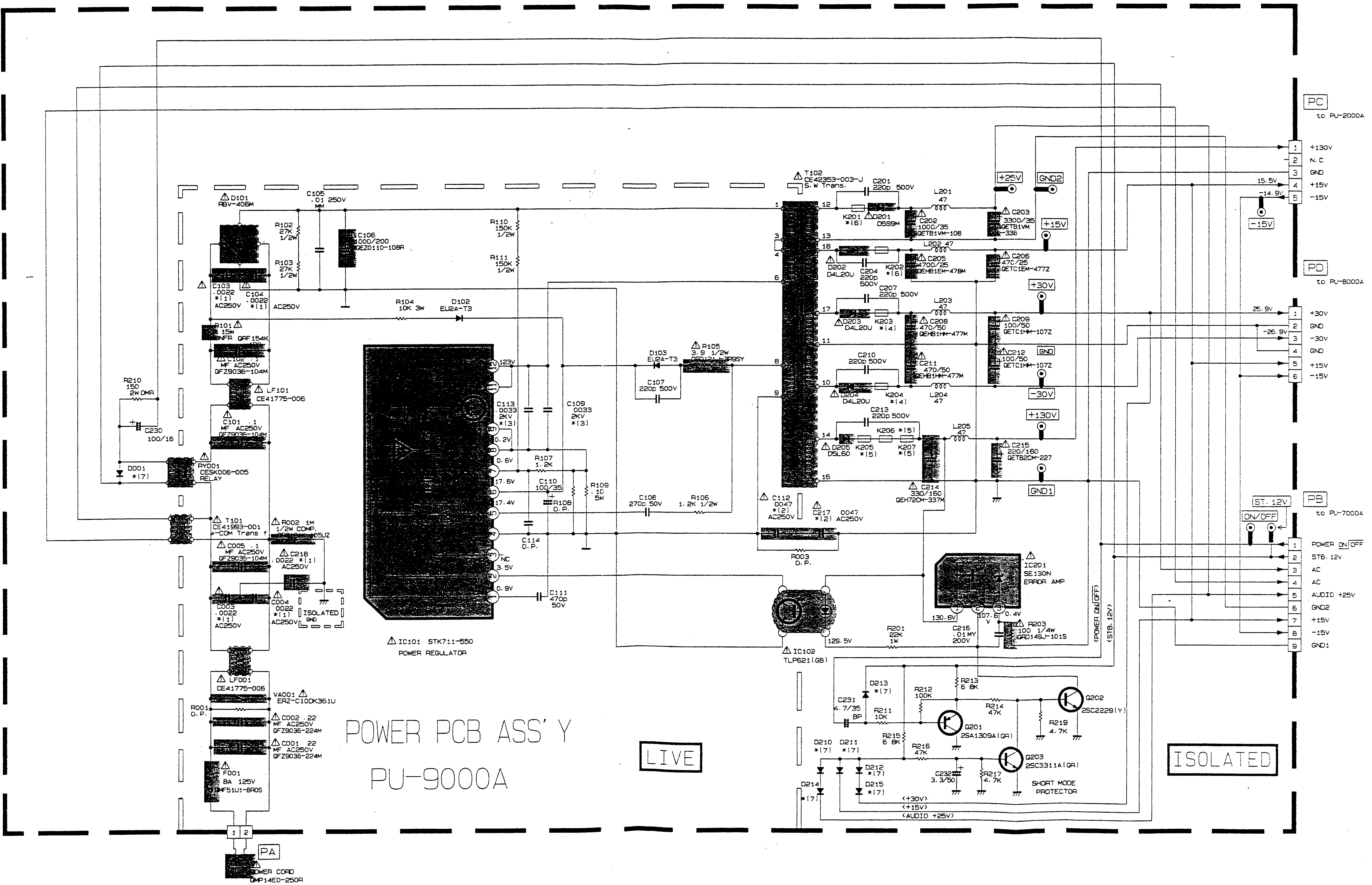
SURROUND PWB ASS'Y HZ-6201A

POWER PWB CIRCUIT DIAGRAMS (PU-9000A)

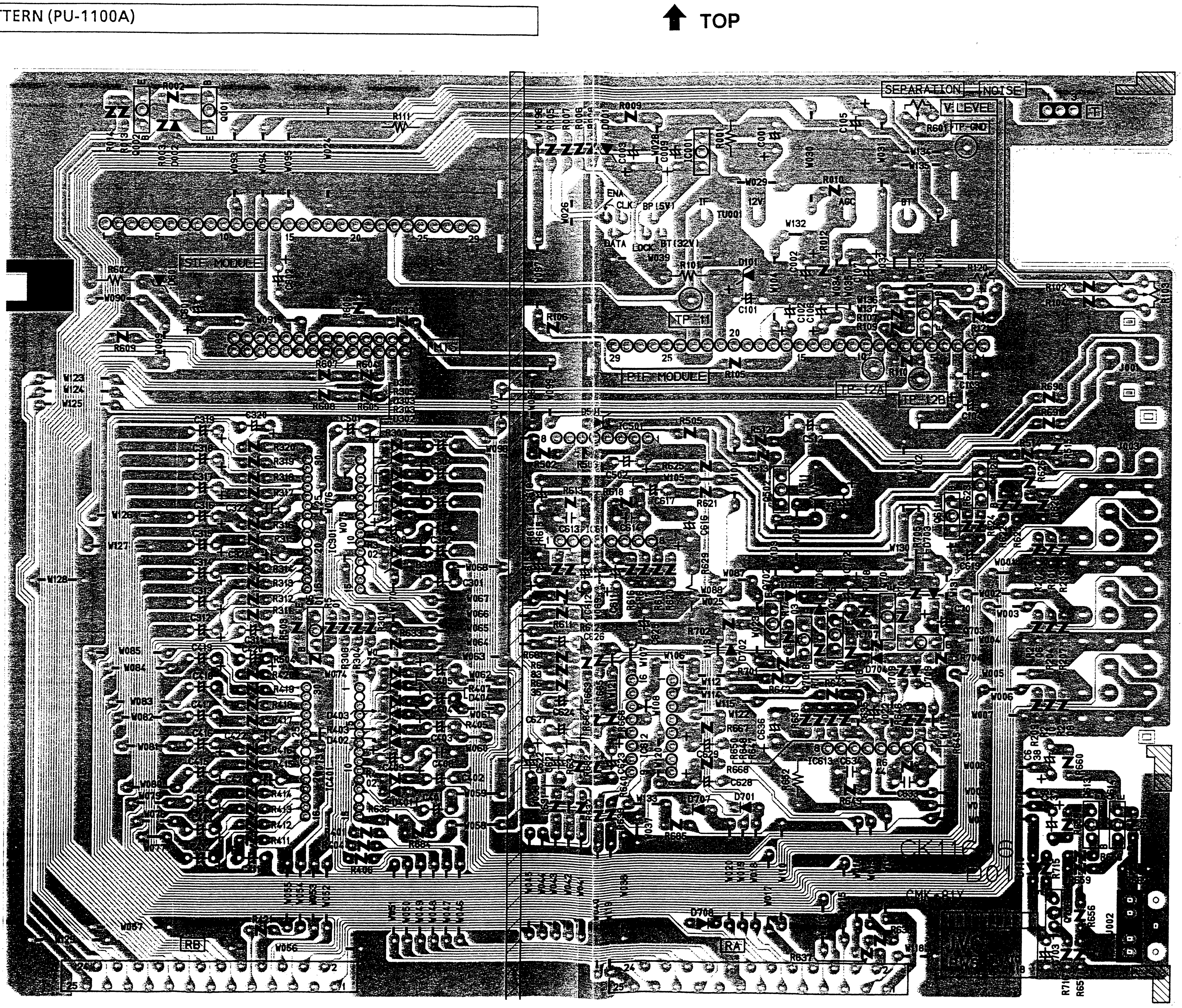
NOTICE !!

- NO WRITING PART NUMBER -

#	KIND / PART NUMBER
*(1)	C CAPACITOR QCZ9033-222A
*(2)	C. CAPACITOR QCZ9033-472A
*(3)	C CAPACITOR QCZ0131-332A
*(4)	BEADS CORE CE42050-001Z
*(5)	BEADS CORE CE41433-001Z
*(6)	BEADS CORE CE41724-00A
*(7)	DIODE 1SS133

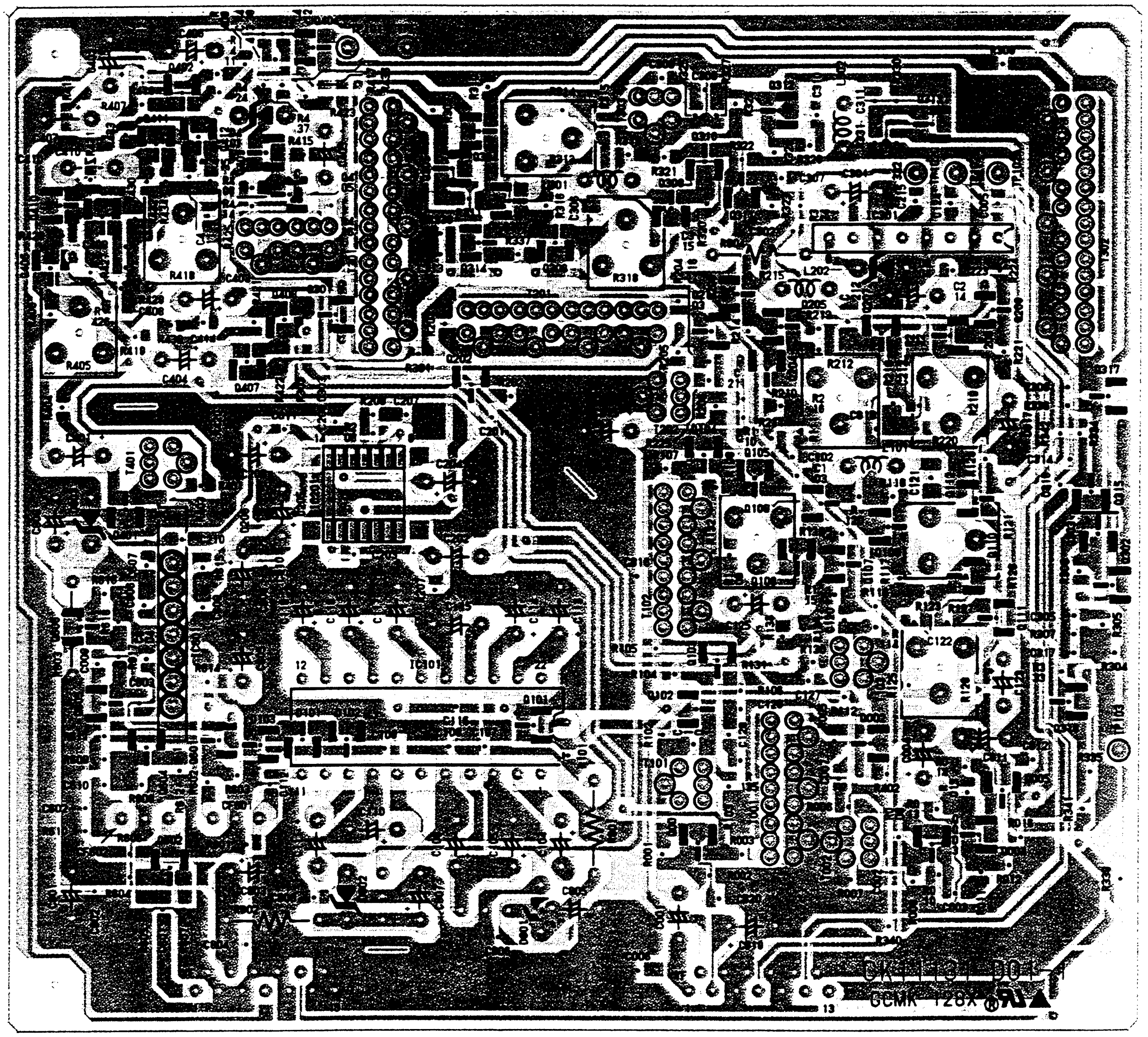

POWER PCB ASS' Y
PU-9000A
LIVE
ISOLATED
D101 RBV-406M
C105 .01 250V MM
R102 27K 1/2W
R103 27K 1/2W
C106 1000/200 QEZ0110-108R
C103 .0022 *(1) AC250V
C104 .0022 *(1) AC250V
R101 15W UNFR QRF154K
C102 .1 MF AC250V QFZ9036-104M
LF101 CE41775-006
C101 .1 MF AC250V QFZ9036-104M
R210 150 2W OMR
C230 100/16
D001 *(7)
RY001 CESK006-005 RELAY
T101 CE41993-001 μ-COM Trans f
R002 1M 1/2W COMP. 05UZ
C005 .1 MF AC250V QFZ9035-104M
C218 .0022 *(1) AC250V
C003 .0022 *(1) AC250V
C004 0022 *(1) AC250V
ISOLATED GND
LF001 CE41775-006
VA001 ERZ-C10DK361U
R001 O.P.
C002 .22 MF AC250V QFZ9036-224M
C001 22 MF AC250V QFZ9036-224M
F001 8A 125V QMF51U1-8R0S
PA
1 2
POWER CORD QMP14E0-250R
R104 10K 3W
D102 EU2A-T3
R110 150K 1/2W
R111 150K 1/2W
IC101 STK711-550 POWER REGULATOR
123V
0.2V
0.6V
17.6V
17.4V
NC
3.5V
0.9V
C113 .0033 2KV *(3)
C109 0033 2KV *(3)
R107 1.2K
C110 100/35
R108 O.P.
R109 .10 5W
C114 O.P.
C111 470p 50V
C108 270p 50V
R106 1.2K 1/2W
D103 EU2A-T3
R105 3.9 1/2W 3R9SY
C107 220p 500V
T102 CE42353-003-J S.W Trans.
C201 220p 500V
K201 *(6)
D201 D5S9M
L201 47
C202 1000/35 QETB1VM-108
C203 3300/35 QETB1VM-338
+25V
GND2
+15V
L202 47
D202 D4L20U
C204 220p 500V
K202 *(6)
C205 4700/25 QEHB1EM-478M
C206 470/25 QETC1EM-477Z
+30V
C207 220p 500V
L203 47
D203 D4L20U
K203 *(4)
C208 470/50 QEHB1HM-477M
C209 100/50 QETC1HM-107Z
GND
C212 100/50 QETC1HM-107Z
C210 220p 500V
C211 470/50 QEHB1HM-477M
D204 D4L20U
K204 *(4)
L204 47
-30V
C213 220p 500V
K206 *(5)
+130V
D205 D5L60
K205 *(5)
K207 *(5)
L205 47
C215 220/160 QETB2CM-227
C214 330/160 QEH72CM-337M
GND1
C112 0047 *(2) AC250V
C217 0047 *(2) AC250V
R003 O.P.
IC102 TLP621(GB)
129.5V
R201 22K 1W
IC201 SE130N ERROR AMP
130.6V
107.6V
0.4V
C216 .01 MY 200V
R203 100 1/4W QRD149J-101S
〈POWER ON/OFF〉
〈STB. 12V〉
C231 4.7/35 BP
D213 *(7)
R211 10K
R212 100K
R213 6 8K
R214 47K
Q201 2SA1309A(QR)
Q202 2SC2229(Y)
R219 4.7K
R215 6 8K
R216 47K
D210 *(7)
D211 *(7)
D212 *(7)
D215 *(7)
D214 *(7)
C232 3.3/50
R217 4.7K
Q203 2SC3311A(QR)
SHORT MODE PROTECTOR
〈+30V〉
〈+15V〉
〈AUDIO +25V〉
PC to PU-2000A
1 +130V
2 N.C
3 GND
4 +15V
5 -15V
15.5V
-14.9V
-15V
PD to PU-8000A
1 +30V
2 GND
3 -30V
4 GND
5 +15V
6 -15V
25.9V
-26.9V
PB to PU-7000A
ST. 12V
ON/OFF
1 POWER ON/OFF
2 STB. 12V
3 AC
4 AC
5 AUDIO +25V
6 GND2
7 +15V
8 -15V
9 GND1

RECEIVER PWB PATTERN (PU-1100A)

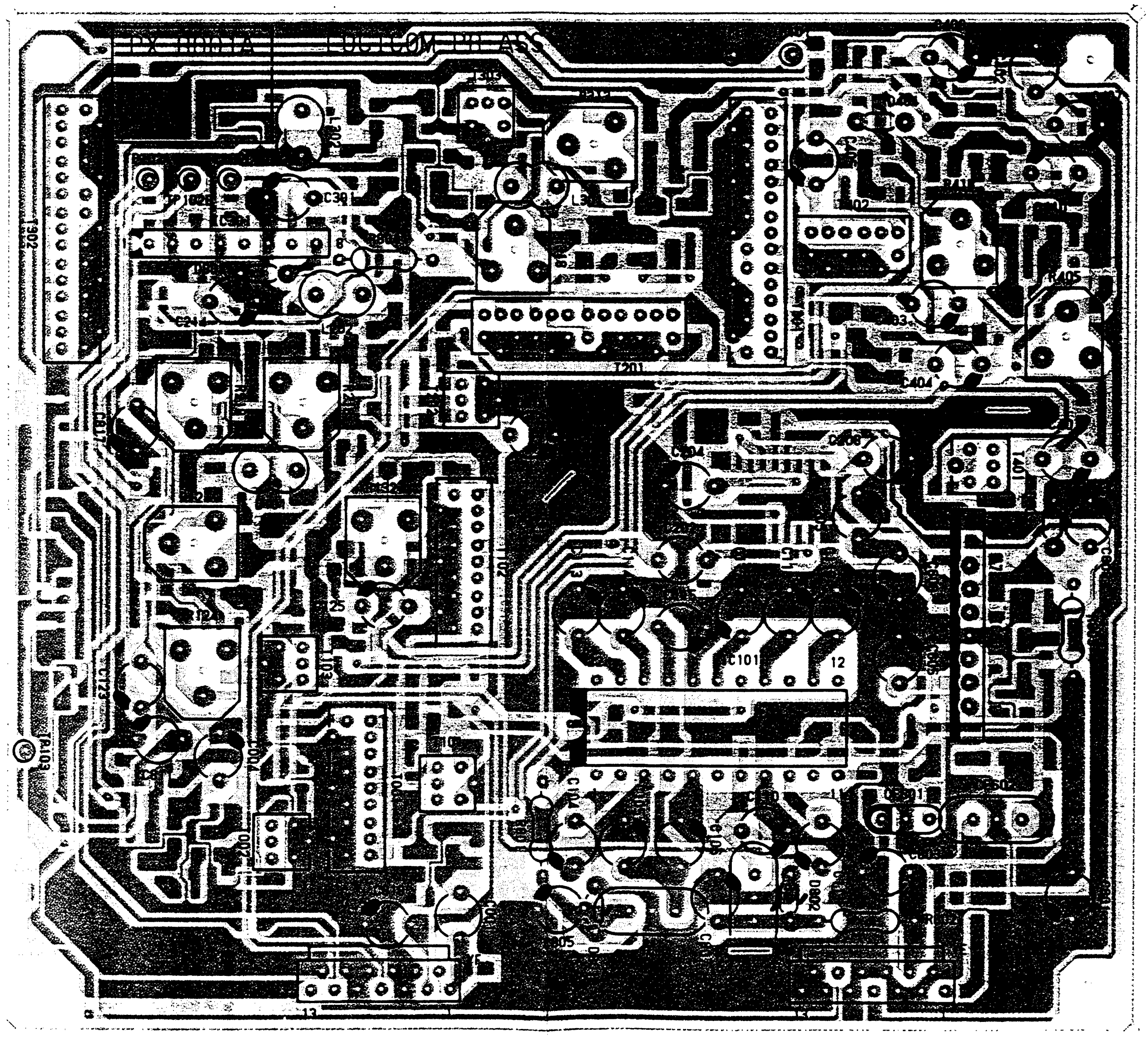

TOP
SEPARATION
NOISE
V.LEVEL
TP-GND
SIF MODULE
PIF MODULE
TP-11
TP-12A
TP-12B
ENA
CLK
DATA
LOCK
BP(5V)
BT(32V)
12V
AGC
TU001
J001
RB
RA
CMK-81X
CK11C

LOGICAL COMB FILTER PWB PATTERN (HZ-4201A)

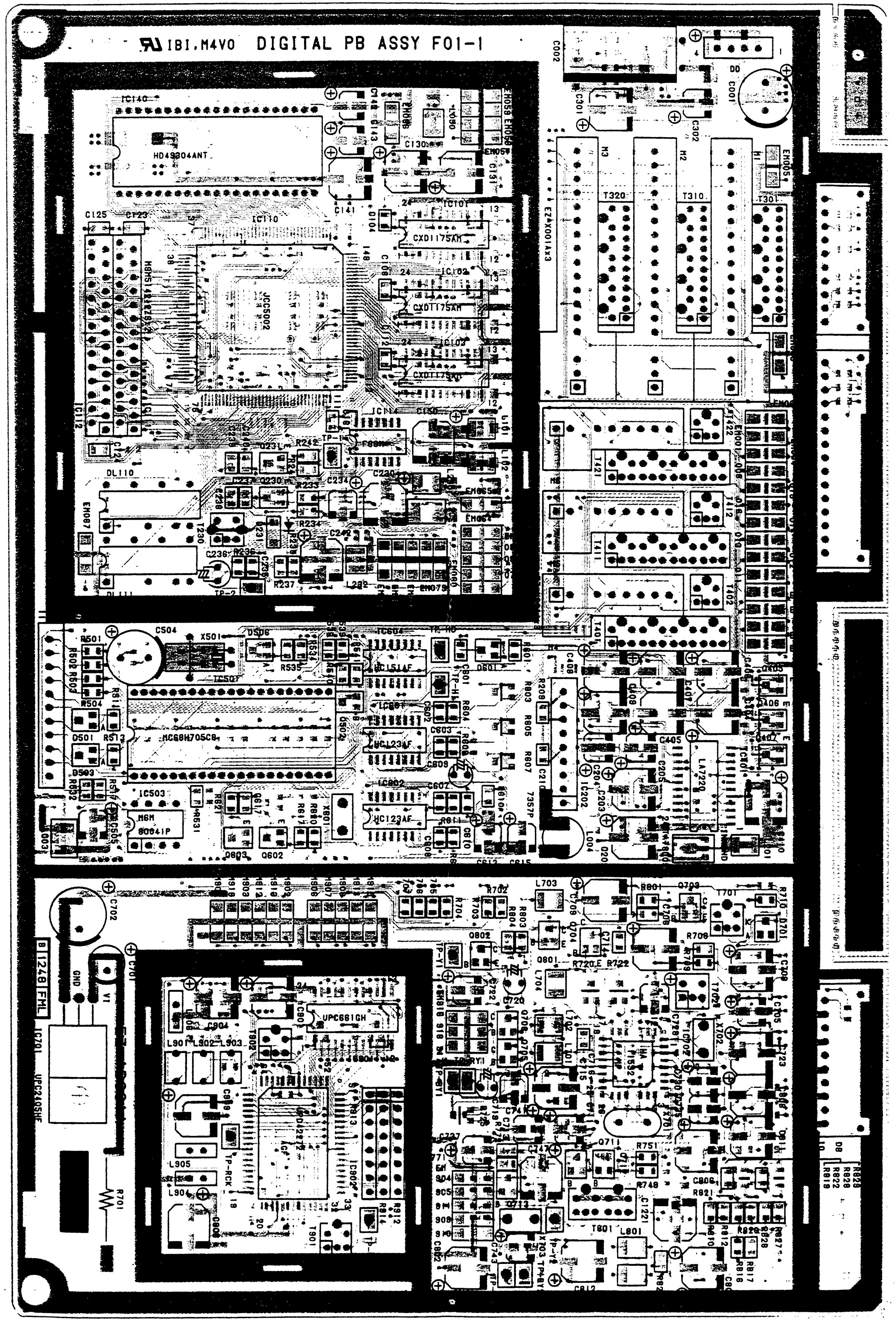
TOP ⬆

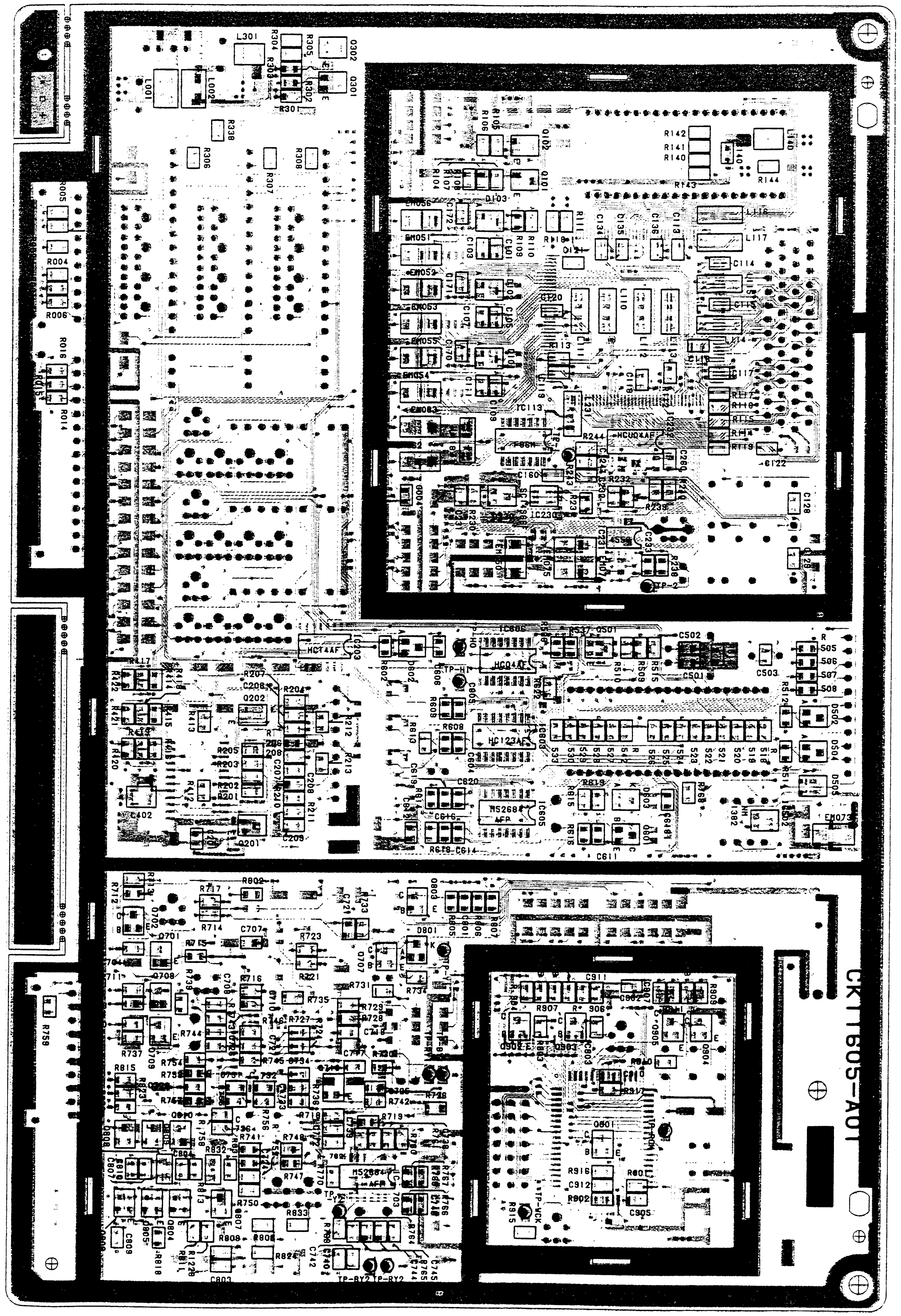


TOP ⬆

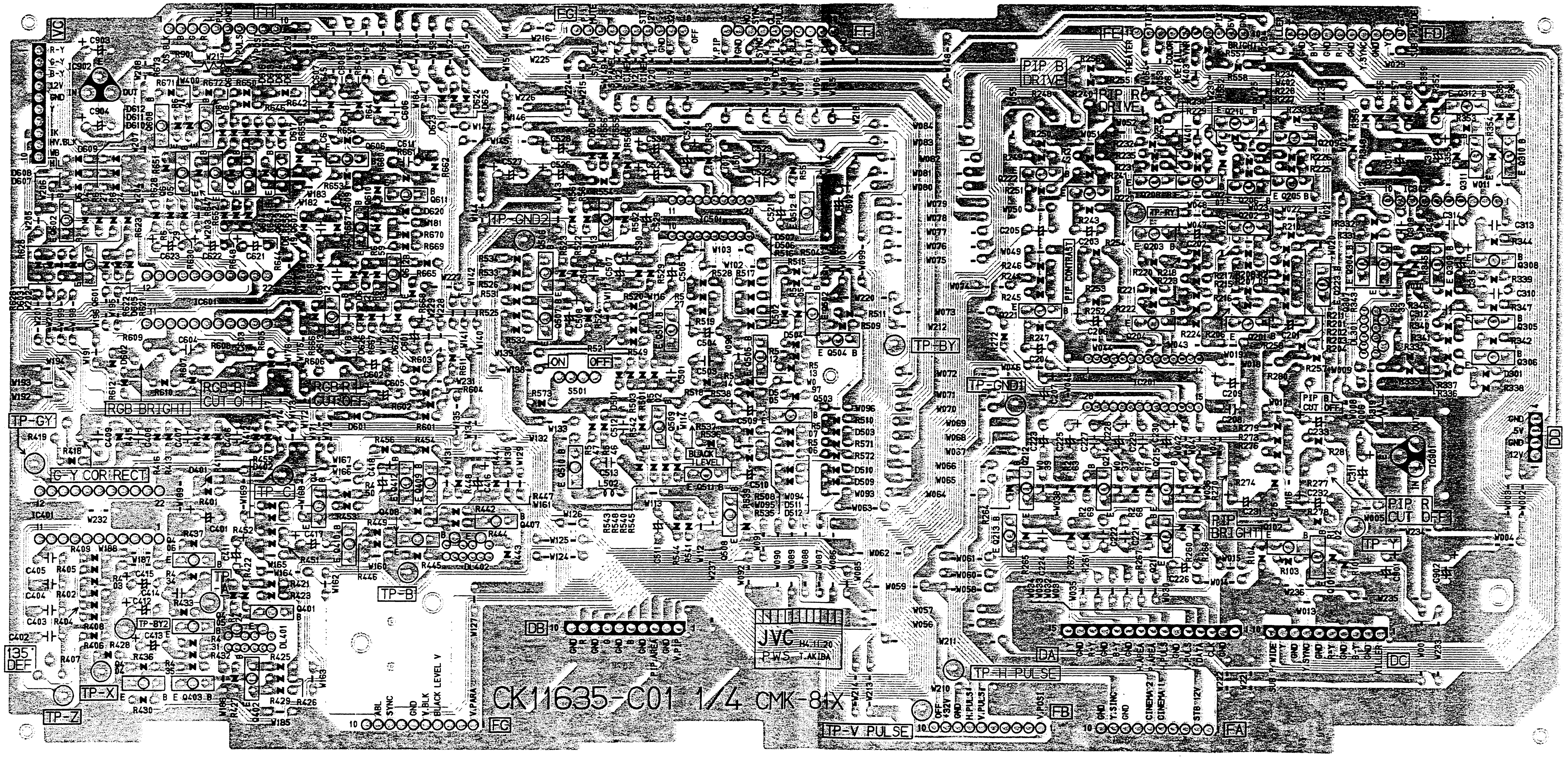


ASPECT CONVERTER PWB PATTERN (EZ-1D002A)

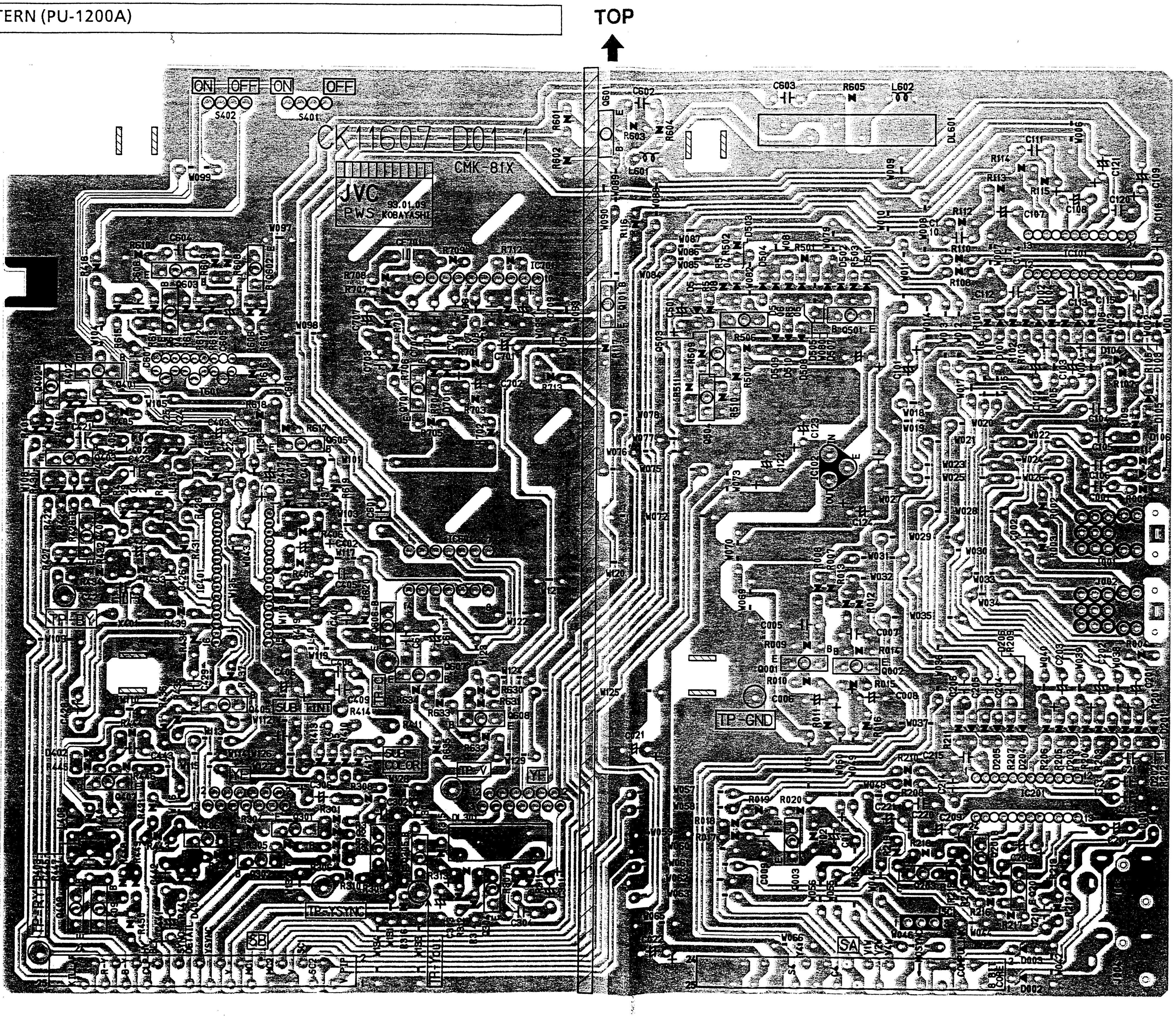

IBI.M4VO DIGITAL PB ASSY F01-1
OP
IC140
HD49304ANT
CXD1175AM
MCS8H705C8
UPC681GH
R701


T
CK11605-A01

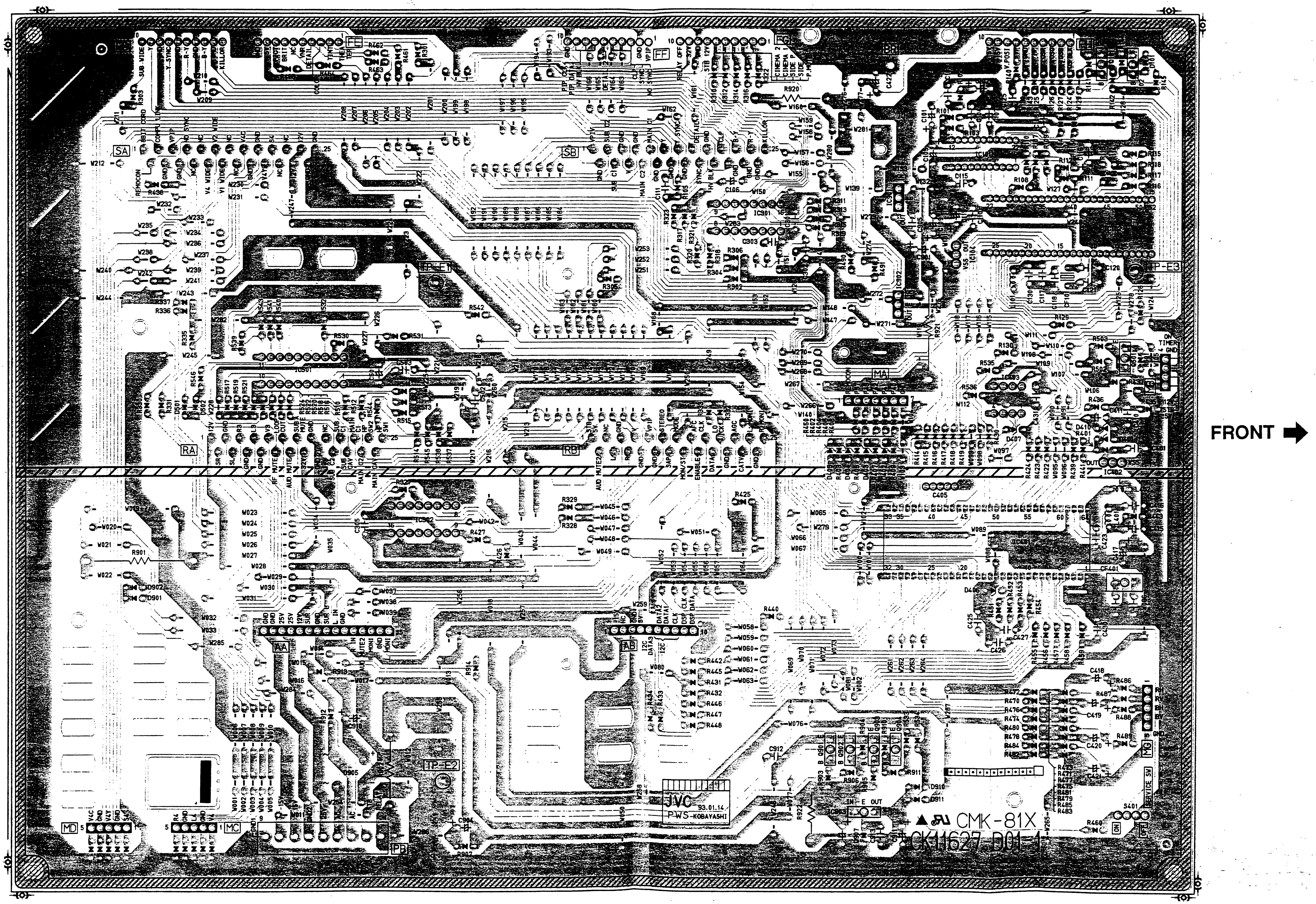
VIDEO PWB PATTERN (PU-1000A)


VC
FH
FG
FE
FD
DD
DA
DB
DC
FA
FB
FC
PIP B DRIVE
PIP R DRIVE
PIP CONTRAST
PIP BRIGHT
PIP R CUT OFF
PIP B CUT OFF
TP-GND1
TP-GND2
TP-BY
TP-GY
TP-C
TP-B
TP-BY2
TP-X
TP-Z
TP-Y
TP-H PULSE
TP-V PULSE
RGB BRIGHT
RGB-B CUT-OFF
RGB-R CUT-OFF
G-Y CORRECT
BLACK LEVEL
135° DEF
ON
OFF
S501
IC401
IC601
IC201
IC501
JVC
P.W.S. T.AKIBA
CK11635-C01 1/4 CMK-81X

S-INPUT PWB PATTERN (PU-1200A)

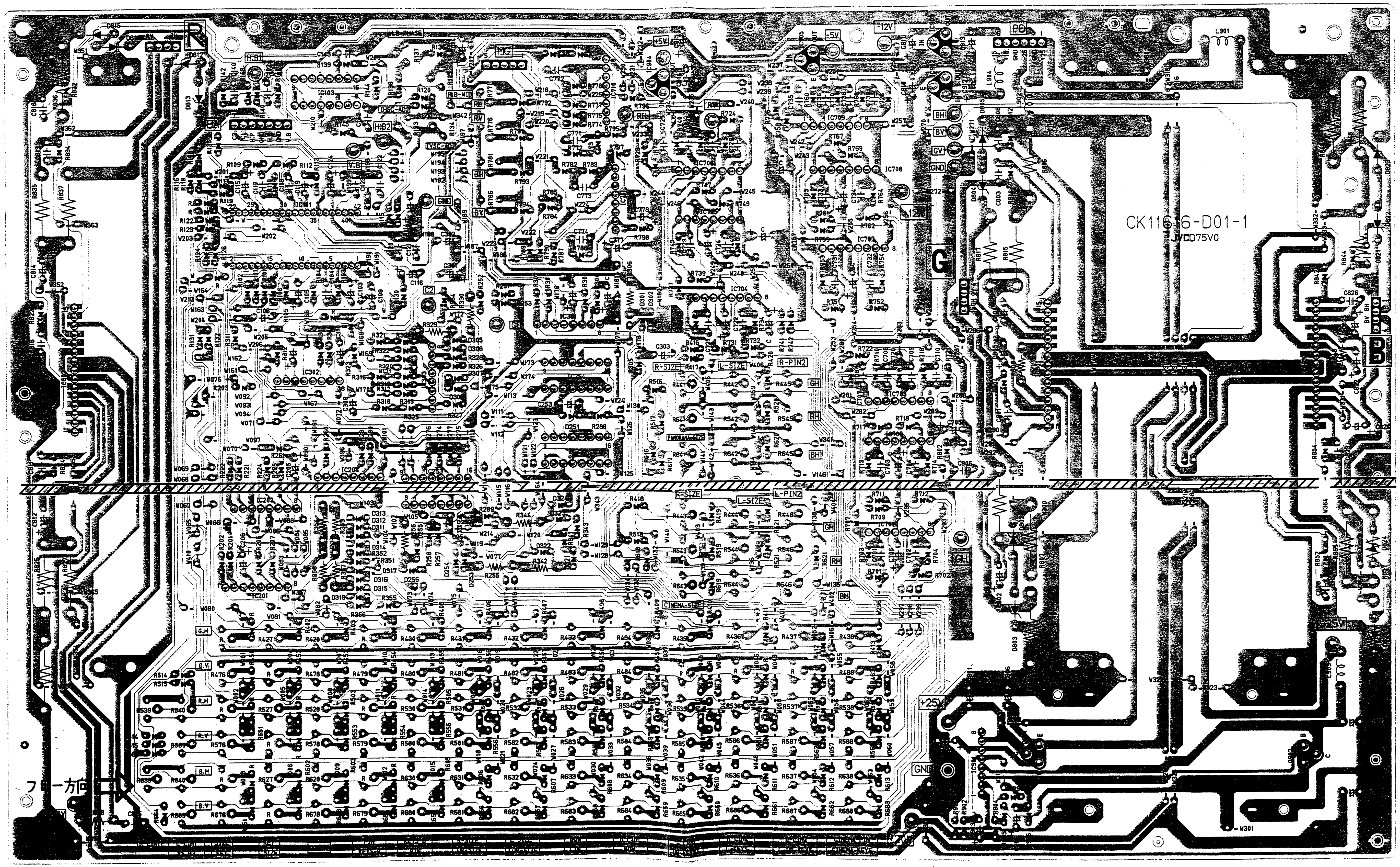

TOP
ON
OFF
ON
OFF
S402
S401
CK11607-D01-1
CMK-81X
JVC
PWS
93.01.09
KOBAYASHI
C603
R605
L602
DL601
TP-BY
SUB TINT
SUB COLOR
TP-V
YE
TP-YSYNC
SB
TP-GND
SA
IC101
IC201

MICROCOMPUTER (MICON) PWB PATTERN (PU-7000A)

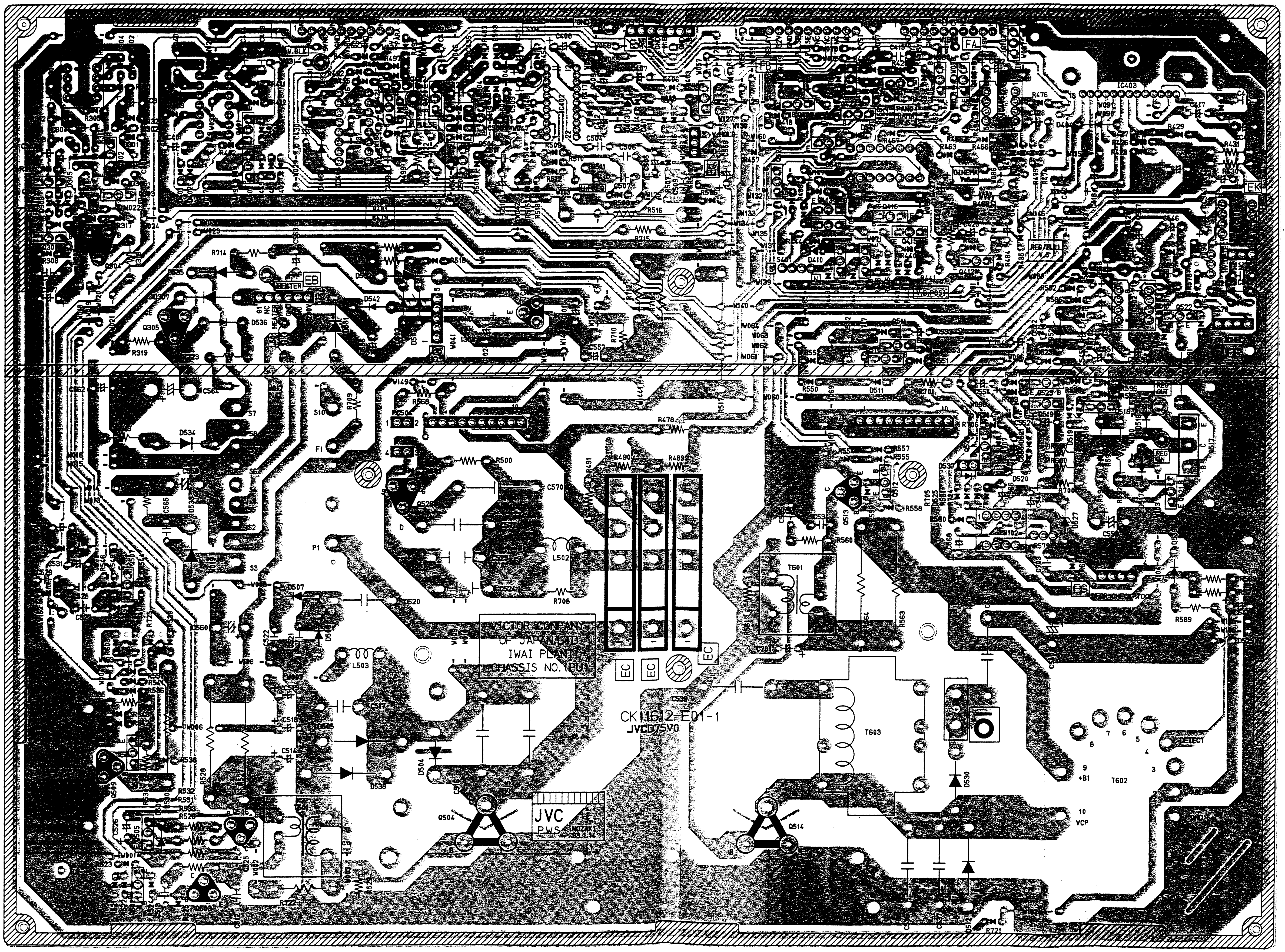

FRONT
CMK-81X
CK11627-D01-1
JVC
93.01.14
PWS-KOBAYASHI
SA
SB
RA
RB
MA
AA
AB
MC
MD
MG
PB
TP-E1
TP-E2
TP-E3
FF
IC501
IC502
S401
SERVICE SW

CONVER PWB PATTERN (PU-8000A)

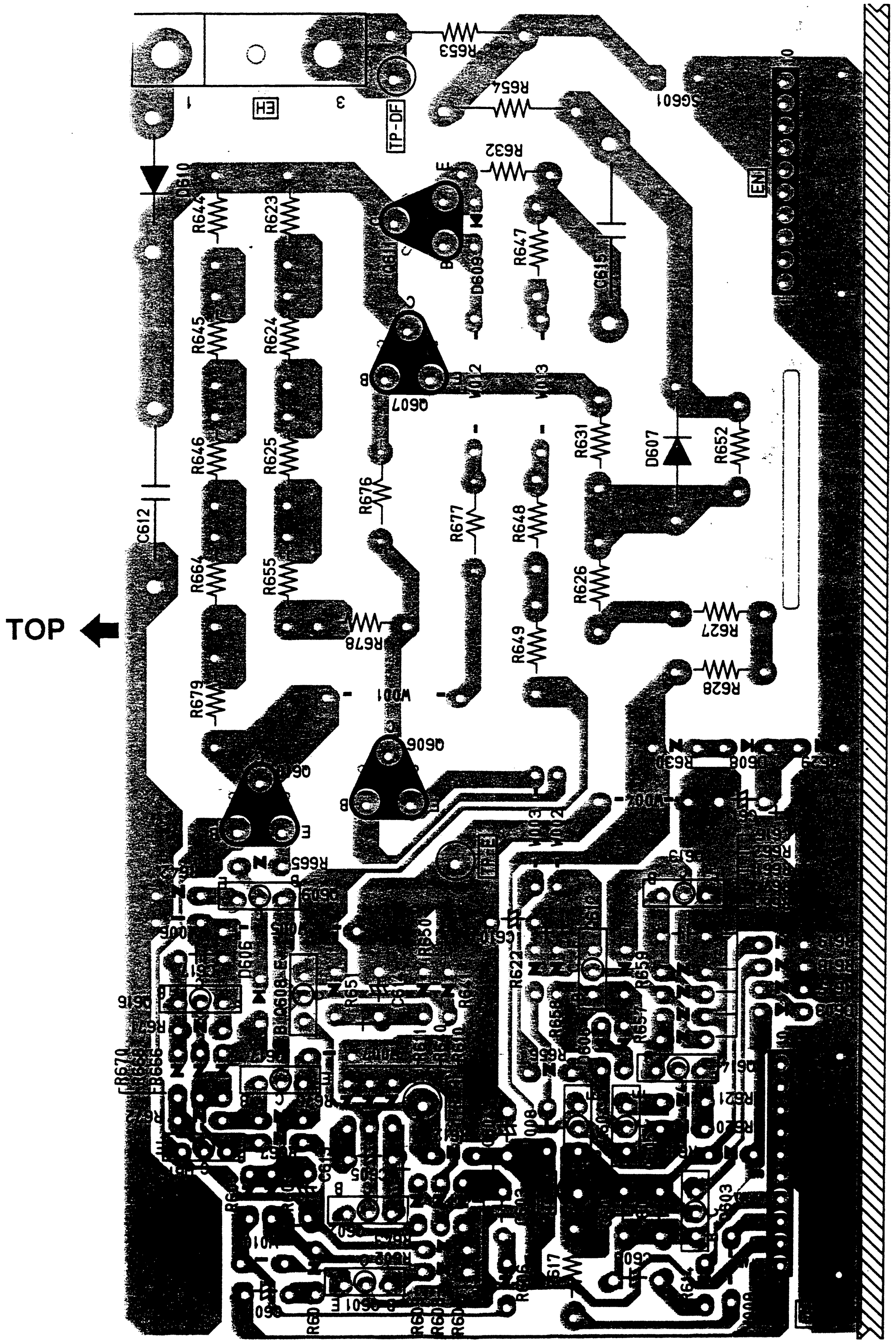
FRONT


CK11616-D01-1
JVCD75V0
G
B
R
-12V
-5V
+5V
+25V
GND
R-SIZE
L-SIZE
R-PIN2
L-PIN2
CINEMA-SIZE
H-B PHASE
H.B-WID
V-SC-ADJ
GH
RH
BH
GV
RV
BV

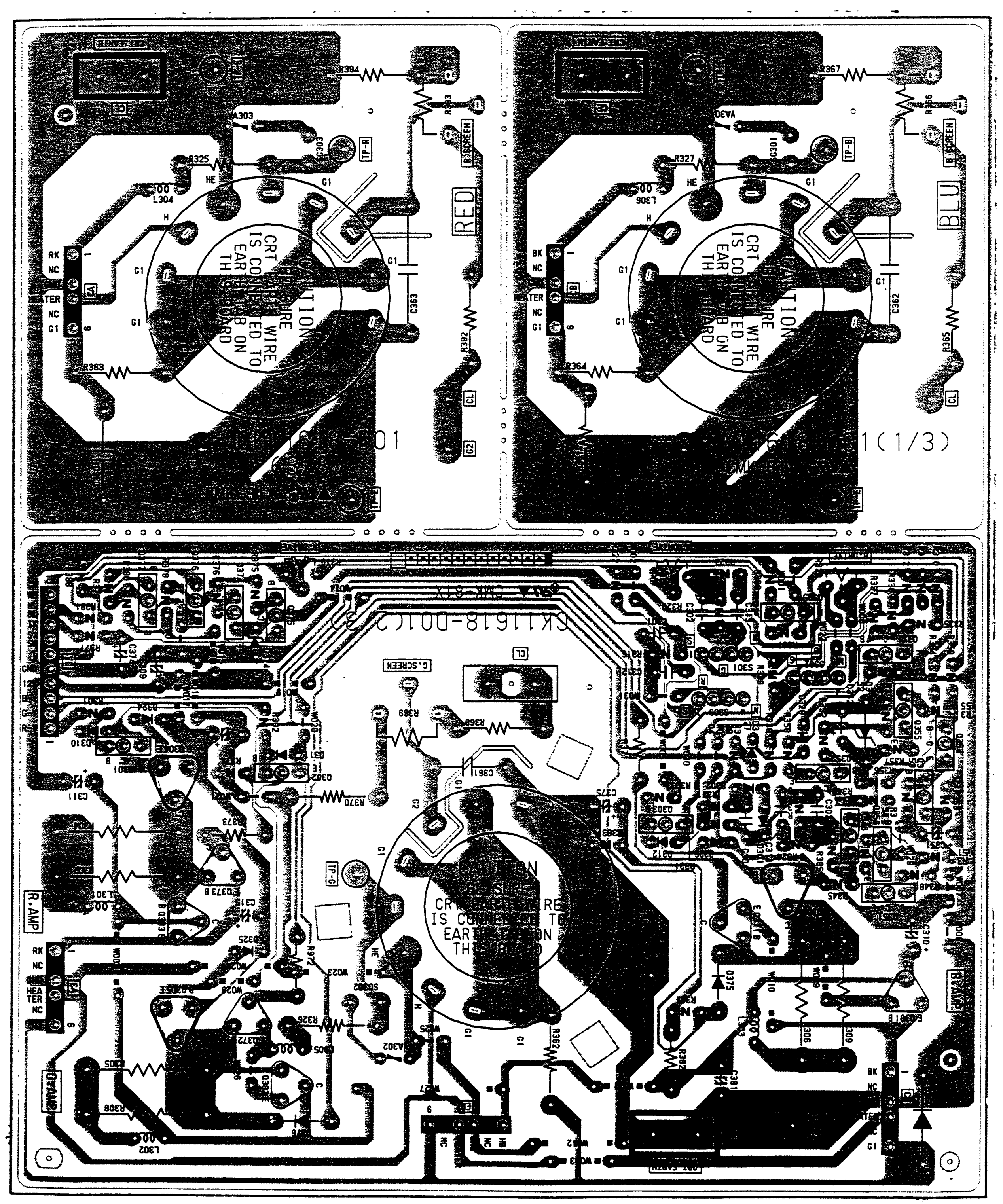
DEF. PWB PATTERN (PU-2000A)


FRONT
VICTOR COMPANY OF JAPAN LTD. IWAI PLANT CHASSIS NO. PU
CK11612-E01-1
JVCD75V0
T601
T602
T603
Q504
Q514
L502
L503
R708
D504
D530
+B1
VCP
DETECT

DYNAMIC FOCUS PWB PATTERN (PU-D001A)

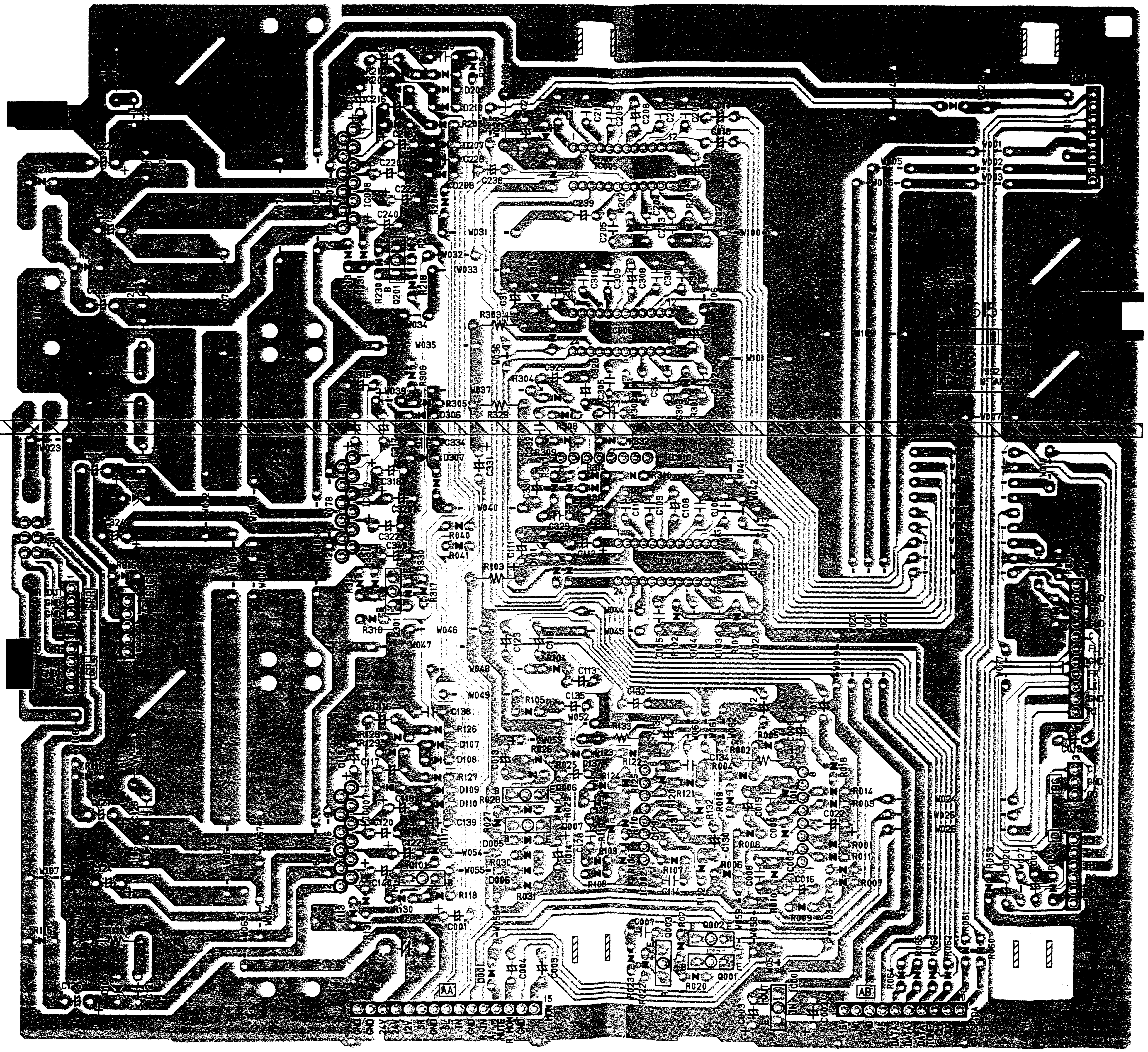

TOP
TP-DF
EH
EN
D610
C612
R644
R645
R646
R664
R679
R623
R624
R625
R655
R653
R654
R632
R647
C615
D609
Q607
Q606
R676
R677
R678
R648
R649
R631
R626
D607
R652
R627
R628
W001
W002
W003
G601
R665
R622

CRT SOCKET PWB PATTERN (PU-3000A)

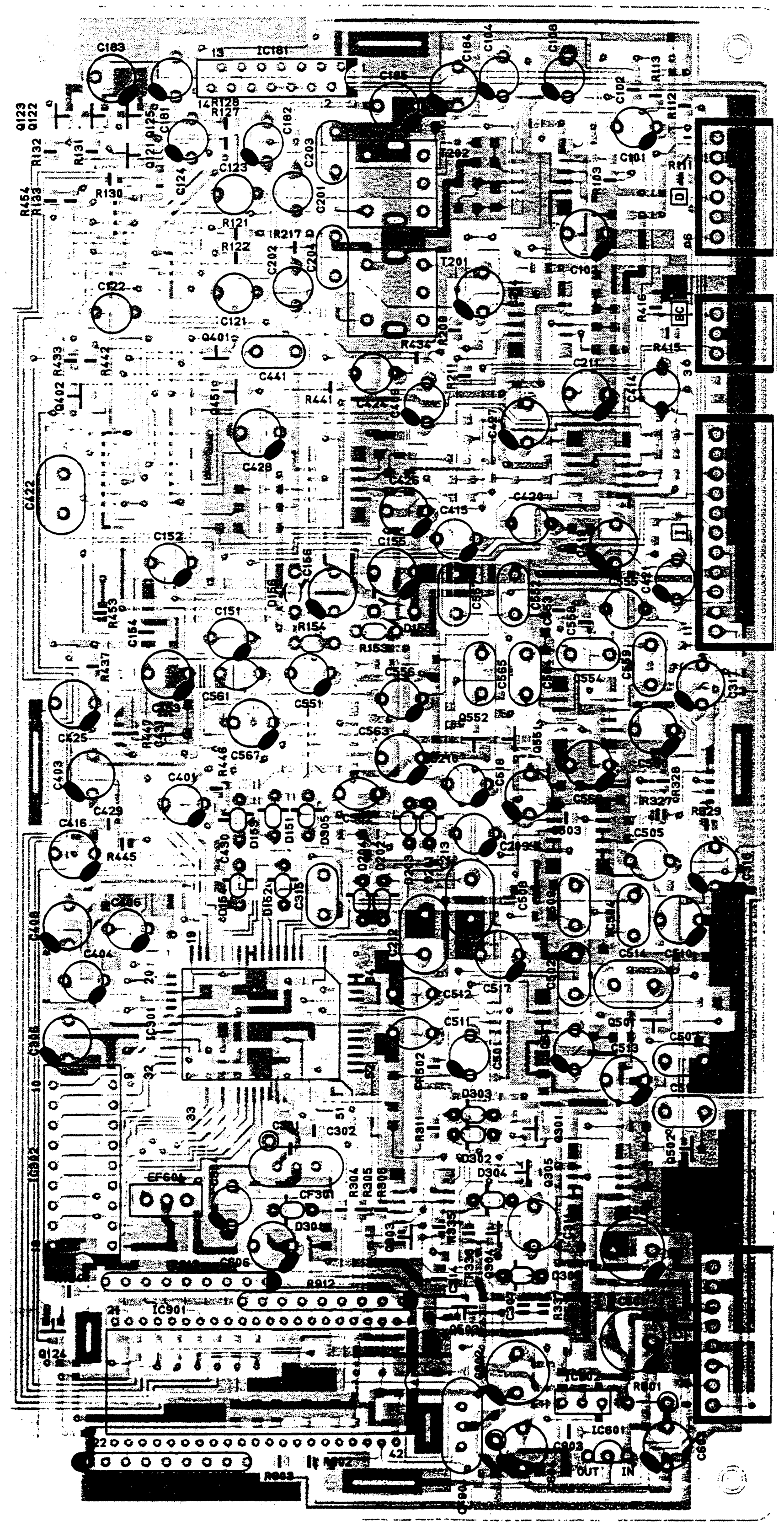

CAUTION
CRT SOCKET WIRE IS CONNECTED TO EARTH STUB ON THE BOARD
RED
BLU
G.SCREEN
R.AMP
RK
NC
HEATER
G1
BK
TP-R
TP-B
TP-G
L304
L306
L302
R363
R364
R365
R382
R325
R327
R308
R368
R369
R370
C361
C362
C363
C311
D310
D375
GK11618-D01(3/3)
GK11618-D01(1/3)

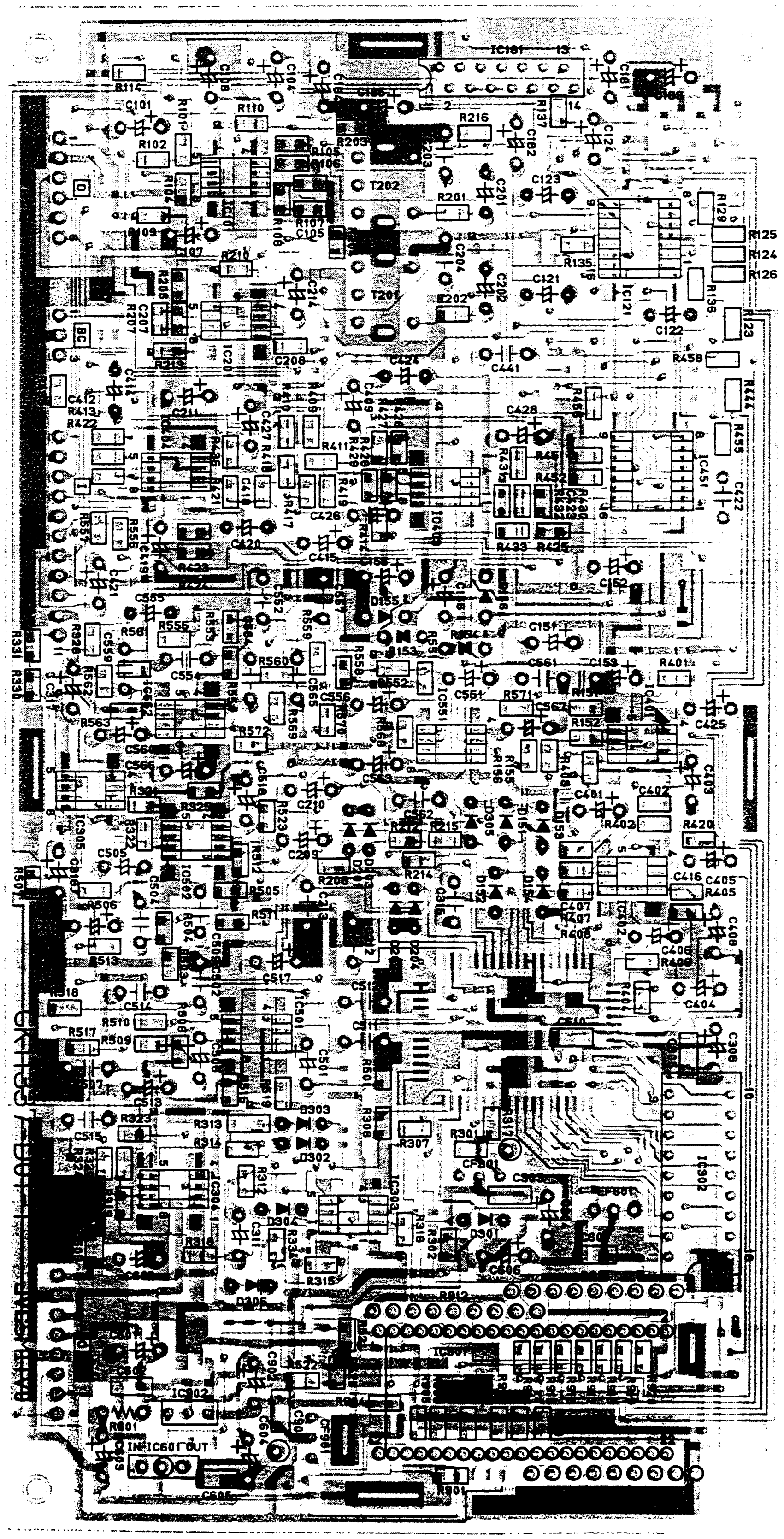
TOP

AUDIO PWB PATTERN (PU-6000A)

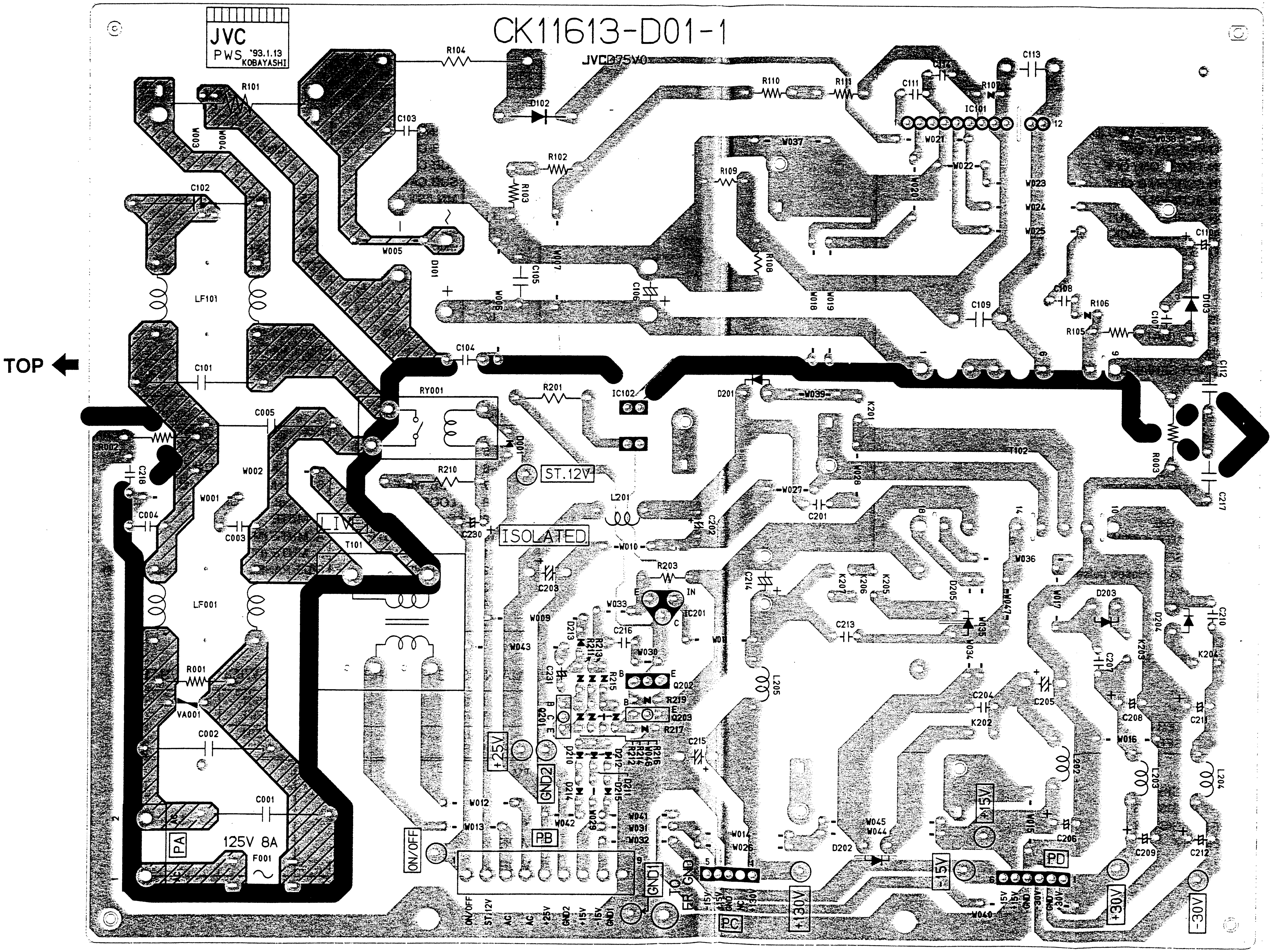

AA
AB
W031
W032
W033
W034
W035
W037
W040
W046
W047
W048
W049
W052
W053
W054
W055
W100
W101
R303
R304
R305
R329
R103
R105
R126
R127
R130
R118
D107
D108
D109
D110
D005
D006
D306
D307
C138
C139
C001
C334
C331
C113
C135
C132
R040
R041
R316
R021
R030
R031
R108
R109
R107
R014
R008
R006
R010
R009
R007
R020
Q001
Q002
Q007
C016
C022
C134
W024
W025
W026
TOP
15

SURROUND PWB PATTERN (HZ-6201A)





POWER PWB PATTERN (PU-9000A)


TOP
CK11613-D01-1
JVC
PWS '93.1.13 KOBAYASHI
JVCB75V0
R104
R101
D102
C103
R102
R103
R110
R111
C111
C113
IC101
W037
R109
R108
W021
W022
W020
W023
W024
W025
C110
D103
R106
R105
C108
C109
C102
W003
W004
W005
D101
C105
W007
W006
C106
W018
W019
LF101
C101
C104
RY001
R201
IC102
D201
W039
K201
T102
R003
C112
C217
R002
C218
C005
W002
D001
R210
ST.12V
W001
C004
C003
LIVE
T101
C230
ISOLATED
L201
C202
W027
W028
C201
W010
R203
IN
E
C
IC201
C203
W033
C214
K207
K206
K205
D205
W036
W017
D203
D204
C210
LF001
W009
W043
D213
R213
R211
C216
W030
C213
W035
W034
C207
K203
K204
R001
VA001
C231
Q202
R219
Q201
Q203
R217
L205
C204
K202
C205
C208
C211
C002
+25V
GND2
D210
D212
R216
R214
R212
D211
D215
D214
C215
L202
W016
L203
L204
C001
W012
W013
W042
W029
W041
W031
W032
W014
W026
W045
W044
D202
+15V
C206
C209
C212
PA
125V 8A
F001
ON/OFF
PB
GND1
TO GND
PC
-15V
+130V
PD
+30V
-30V
W040
ON/OFF
ST.12V
AC
AC
+25V
GND2
+15V
-15V
GND1

MAIN CPU CONTROL MODE

1.OUTPUT PORT

① MAIN CPU (PU-7000A IC401)

PIN No.	Port name	Output contents
60	DSP C LOCK	DSP CPU (CLOCK)
59	PIP C LOCK	ASPECT CPU (CLOCK)
58	DSP / PIP DATA	DSP / ASPECT CPU (DATA)
44	POWER	POWER ON / OFF
43	ON TIMER	ON TIMER ON / OFF
42	R	ON SCREEN R OUT
41	G	ON SCREEN G OUT
40	B	ON SCREEN B OUT
39	VOB BLK	ON SCREEN BACK GROUND OUT
32	CLK	TONE CONTROL I^{2}C-Bus(SCL)
31	DATA1	〃 (SDA1)
30	DATA2	〃 (SDA2)
29	DATA3	〃 (SDA3)
7	CLK	M50255 / M50253 / TC4021 (CLOCK)
8	255DATA	M50255 (DATA)
9	253DATA	M50253 (DATA)
11	TU C LOCK	TUNER SERIAL CONTROL (CLOCK)
12	TU DATA	〃 (DATA)
13	TU EN	〃 (ENABLE)
14	KEY SCAN	KEY SCAN OUTPUT
51	MEMORY CLK	AT93C66 (CLK)
50	〃 DI	〃 (DI)
49	〃 CS	〃 (CS)
48	CAPTION	CAPTION CONTROL
47		NOT USED
46	4021 P/S	TC4021 P/S
45	AGC	AGC MUTE (OPEN when in steady state)
17		NOT USED
18	TINT	TINT (Up increases pulse length)
19	COLOR	COLOR (〃)
20	PICT	PICTURE (〃)
21	BRIT	BRIGHT (〃)
22	DETAIL	DETAIL (〃)
23	RH	CONVERGENCE ADJ. RH
24	RV	〃 RV
25	BH	〃 BH
26	BV	〃 BV
27	VP	V CENTER ADJ.
28		NOT USED

(Note)

- M50255 (PU-7000A IC501) SHIFT REGISTER
- M50253 (PU-7000A IC301) SHIFT REGISTER
- TC4021 (PU-7000A IC302) SHIFT REGISTER
- AT93C66 (PU-7000A IC403) MEMORY

② IC501 (M50255P)

PIN No.	Port name	Output contents
4	MAIN C1	MAIN Picture TV / VIDEO switching output (see Ⓐ)
5	MAIN C2	〃
6	MAIN CAV	〃
7	SUB C1	SUB Picture TV / VIDEO switching output (see Ⓐ)
8	SUB C2	〃
9	SUB CAV	〃
10	MN / ST	MTS switching output (see Ⓑ)
11	MAIN / SAP	〃
12	RF MUTE	RF MUTE
13	VNR	VNR ON OFF
14	HP SW 1	CORDLESS JACK switching output (see Ⓒ)
15	HP SW 2	〃
16		NOT USED
17		NOT USED
18	CABLE A / B	CABLE A / B
19	TEST	TEST PATTERN ON / OFF

③ IC301 (M50253P)

PIN No.	Port name	Output contents
4		REGUREL, FULL / CINEMA, PANORAMA
5	THEATER	THEATER ON / OFF
6	MAIN WIDE	MAIN picture wide ON / OFF
7	SUB WIDE	SUB picture wide ON / OFF
8	LOOP CUT	Loop cut ON / OFF
9	P. MUTE	P. MUTE
10	MAIN A. MUTE	A. MUTE (MAIN picture)
11	SUB A. MUTE	A. MUTE (HEAD PHONE)
12	S. PANEL 1	SIDE PANEL switching output (see Ⓓ)
13	S. PANEL 2	〃
14	CINEMA 1	ASPECT switching output (see Ⓔ)
15	CINEMA 2	〃

Ⓐ MAIN / SUB PICTURE TV / VIDEO SWICHING OUTPUT

MAIN PICTURE	IC501 4PIN	IC501 5PIN	IC501 6PIN	IC301 8PIN
SUB PICTURE	IC501 7PIN	IC501 8PIN	IC501 9PIN	
TV	L	L	L	L
VIDEO 1	H	L	L	H
VIDEO 2	L	H	L	L
VIDEO 3	L	L	H	L
VIDEO 4	H	H	L	L

Ⓑ MTS SWICHING OUTPUT

	IC501 10PIN	IC501 11PIN
STEREO	L	H
SAP	L	L
MONO	H	H

Ⓒ CORDLESS JACK SWICHING OUTPUT

	IC501 14PIN	IC501 15PIN
MAIN	L	L
MAIN / PIP	H	L
SURROUND	L	H

Ⓓ SIDE PANEL SWICHING OUTPUT

	IC301 14PIN	IC301 15PIN	IC301 4PIN
REGUREL	L	L	L
FULL	H	L	L
CINEMA	L	H	H
PANORAMA	H	H	H

Ⓔ ASPECT SWICHING OUTPUT

	IC301 12PIN	IC301 13PIN
DARK	L	H
CENTER	H	L
BRIGHT	L	L

2.INPUT PORT

① MAIN CPU (PU-7000A IC401)

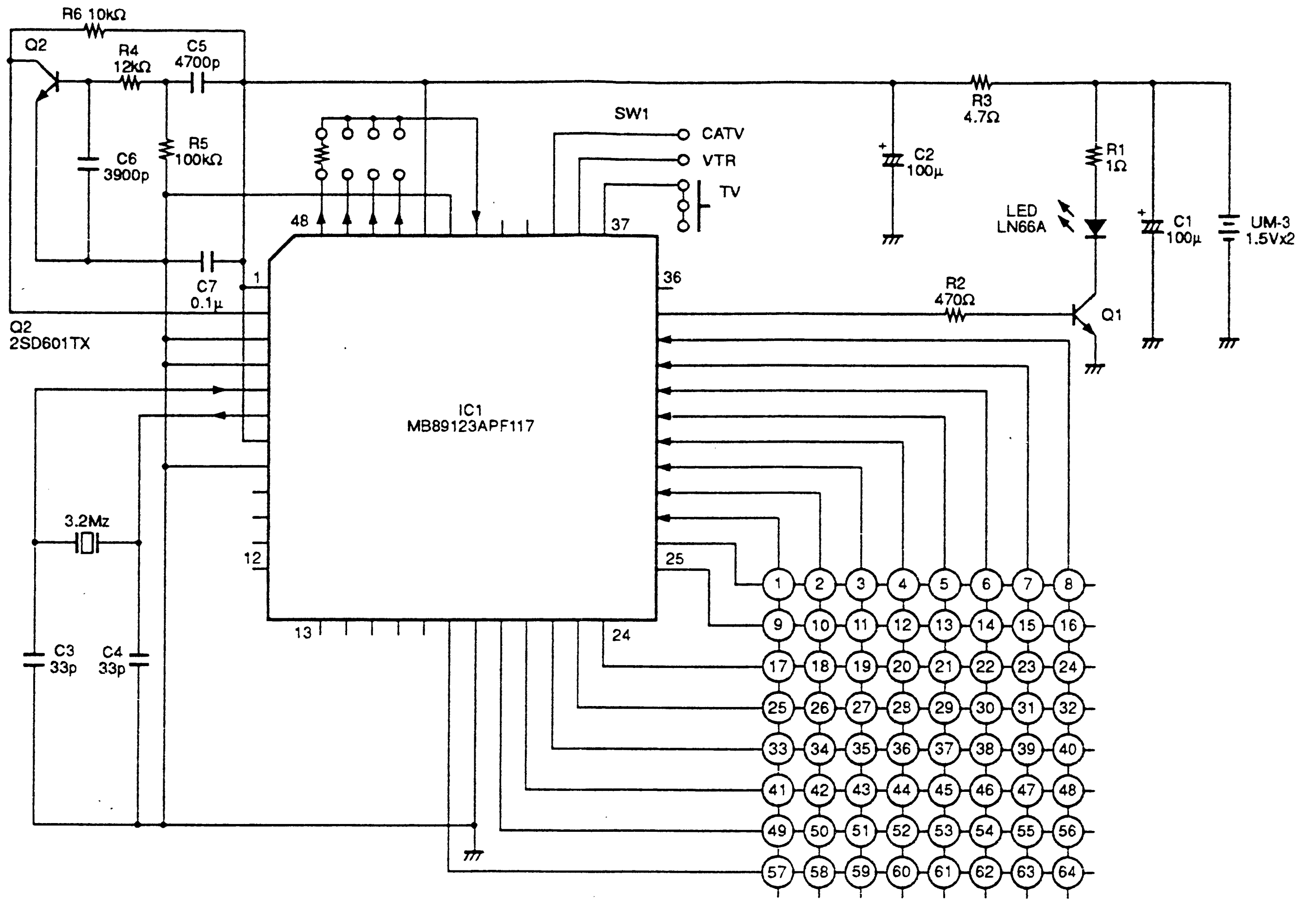
PIN No.	Port name	Input contents
57	8 bit CORD	COMPULINK Data (8 bit)
56	CE	DROPS AC POWER DETECT
53	REMOCON	REMOTO CON.DATA (Active "L" INPUT)
38	SYNC DET.	SYNC. DETECT INPUT
37	AC IN	50 / 60Hz AC INPUT
36	P40	KEY SCAN AT93C66 (DO)
35	P41	〃
34	P42	〃
33	P43	〃
10	4021 Q8	TC4021 (Q8)
4	AFC	AFC S CURVE
5	ADJ.	SERVICE SW (SERVICE MODE "GND")
6	LOCK	TUNER LOCK INPUT

② IC302 (TC4021)

PIN No.	Port name	Input contents
7		NOT USED
6	SAP	SAP
5	STEREO	STEREO
4	V1 WIDE	V1 WIDE DET.
13	V2 WIDE	V2 〃
14	V4 WIDE	V4 〃
15		NOT USED
1		NOT USED

(Note)
- TC4021 (PU-7000A IC302) SHIFT REGISTER
- AT93C66 (PU-7000A IC403) MEMORY

REMOTO CONTROL CIRCUIT DIAGRAM


R6 10kΩ
Q2
R4 12kΩ
C5 4700p
C6 3900p
R5 100kΩ
C7 0.1μ
Q2 2SD601TX
3.2Mz
C3 33p
C4 33p
48
1
12
13
24
25
36
37
IC1 MB89123APF117
SW1
CATV
VTR
TV
C2 100μ
R3 4.7Ω
R1 1Ω
LED LN66A
C1 100μ
UM-3 1.5Vx2
R2 470Ω
Q1

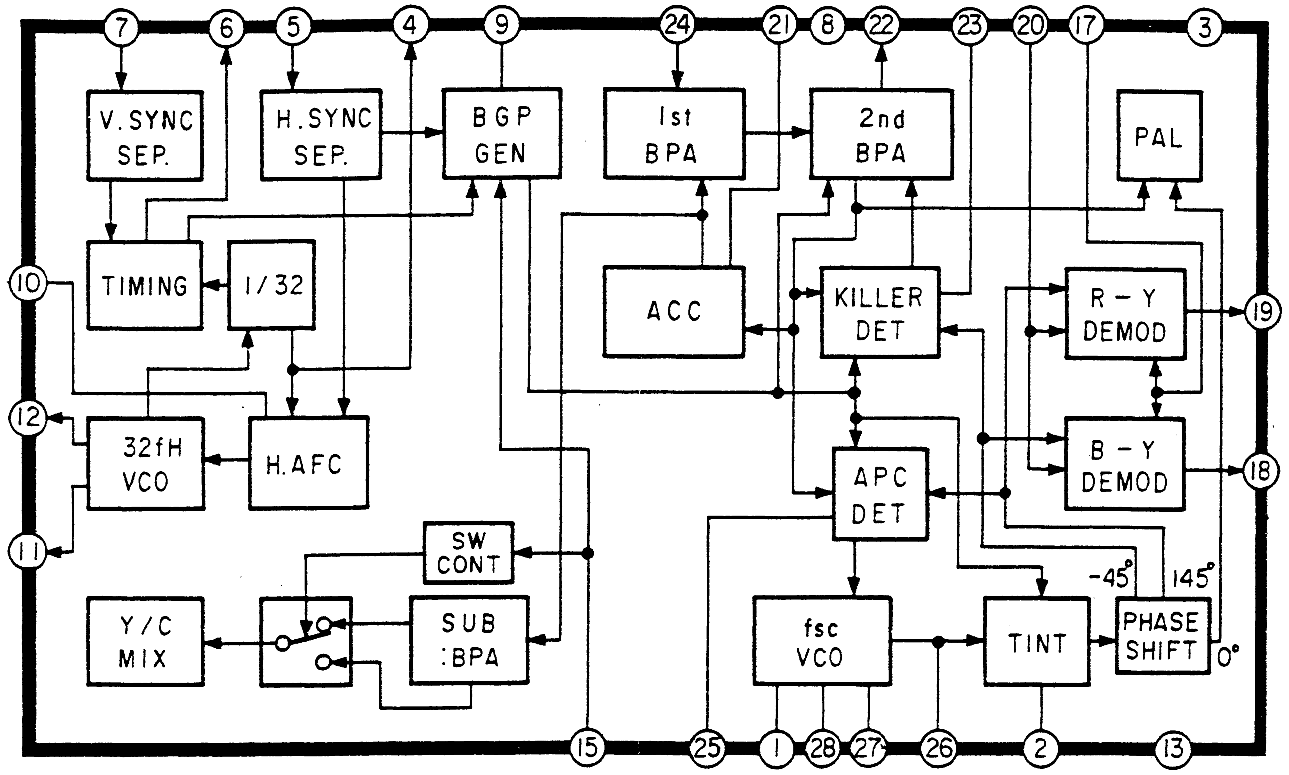
RM-C980-01-KH
REMOTE CONTROL

Key No.	Key NAME	VTR	CATV	Key No.	Key NAME	VTR	CATV
1	MENU	–	–	46	4	※	＊
2	CLOSED CAPTION	TV	TV	47	5	※	＊
3	C1/C2	TV	TV	48	6	※	＊
4	------------------------	TV	TV	49	7	※	＊
5	PIP ON/OFF	–	TV	50	8	※	＊
6	FREEZE	–	TV	51	9	※	＊
7	SOUND MODE	TV	TV	52	RETURN	–	＊
8	TV/VIDEO	TV	TV	53	100＋	–	＊
9	THEATER/AV STA	–	–	54	POWER	※	＊
10	FUNCTION –	TV	TV	55	CHANNEL –	※	＊
11	FUNCTION △	TV	TV	56	CHANNEL ＋	※	＊
12	FUNCTION ▽	TV	TV	57	DISPLAY	※	TV
13	FUNCTION ＋	TV	TV	58	SWAP	※	TV
14	MUTE	TV	TV	59	ANT/CABLE	※	TV
15	VOLUME –	TV	TV	60	SOURCE	※	TV
16	VOLUME ＋	TV	TV	61	PIP/POP	※	TV
42	0	※	＊	62	MAIN/SAP	※	TV
43	1	※	＊	63	CATEGORY PREVIEW	–	–
44	2	※	＊	64	ASPECT	TV	TV
45	3	※	＊				

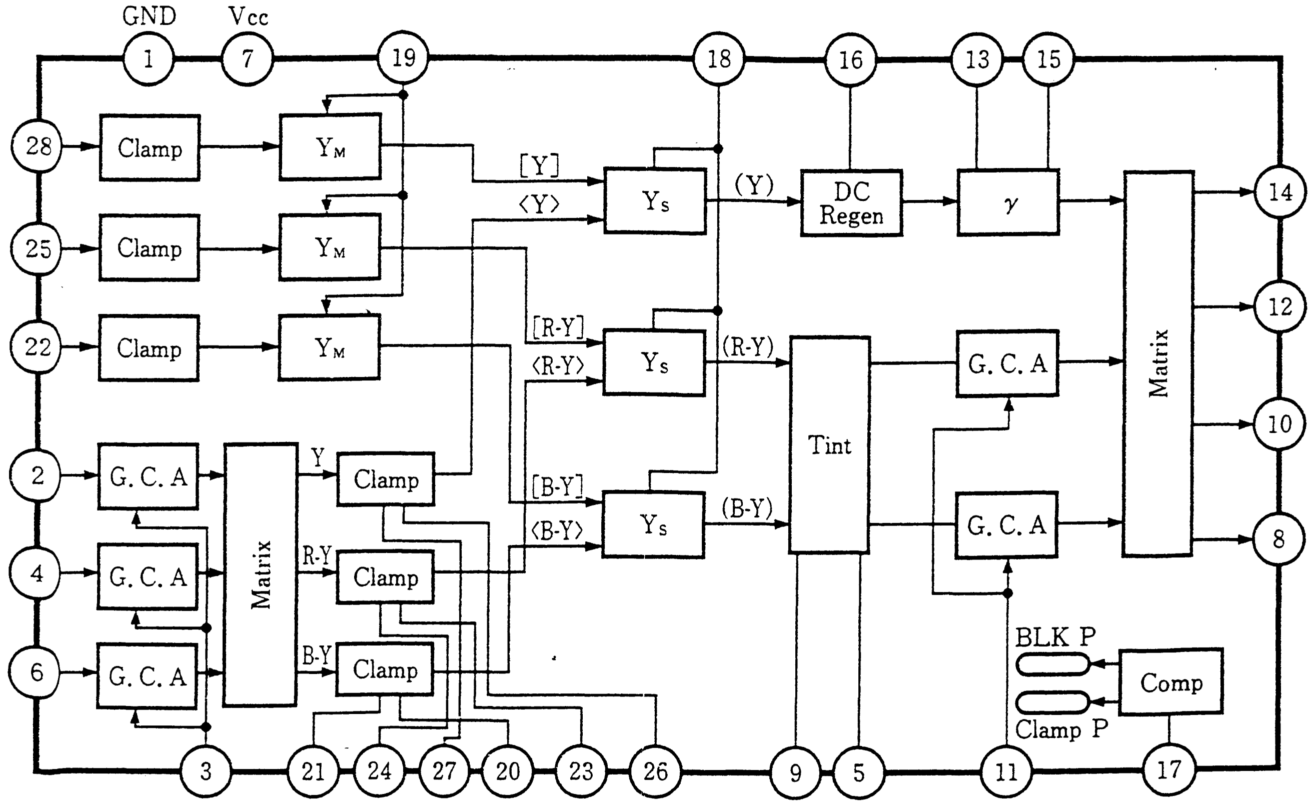
※……VTR PRESET key ＊……CATV PRESET key

ICS BLOCK DIAGRAMS

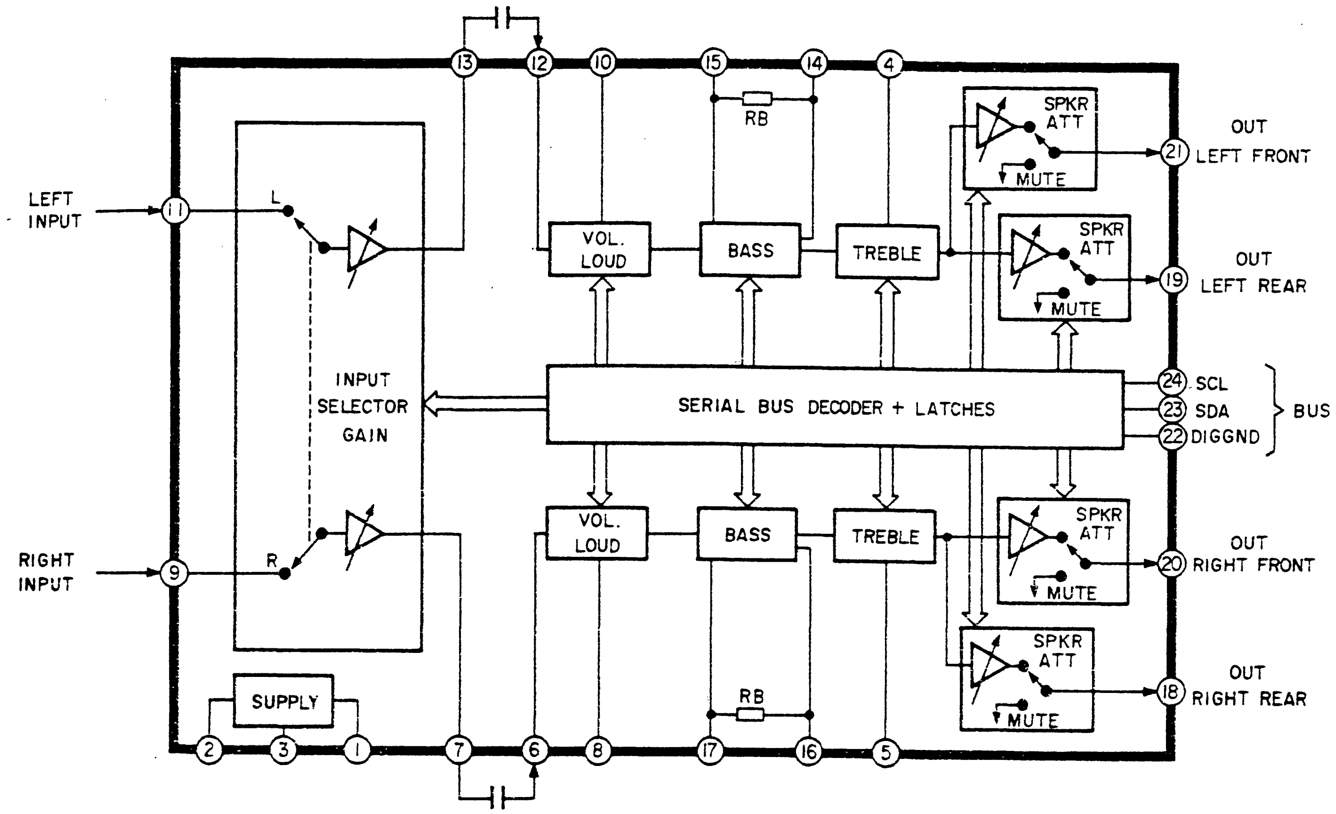
■ EZ-1D002A IC702


7
6
5
4
9
24
21
8
22
23
20
17
3
V.SYNC SEP.
H.SYNC SEP.
BGP GEN
1st BPA
2nd BPA
PAL
TIMING
1/32
ACC
KILLER DET
R – Y DEMOD
B – Y DEMOD
APC DET
32fH VCO
H.AFC
SW CONT
SUB BPA
Y/C MIX
fsc VCO
TINT
PHASE SHIFT
-45°
145°
0°
10
12
11
19
18
15
25
1
28
27
26
2
13

■ PU-1000A IC201


GND
Vcc
1
7
19
18
16
13
15
28
25
22
Clamp
Y_M
[Y]
⟨Y⟩
Ys
(Y)
DC Regen
γ
Matrix
14
12
10
8
[R-Y]
⟨R-Y⟩
(R-Y)
[B-Y]
⟨B-Y⟩
(B-Y)
Tint
G.C.A
2
4
6
Y
R-Y
B-Y
BLK P
Clamp P
Comp
3
21
24
27
20
23
26
9
5
11
17

■ PU-6000A IC004～IC006


13
12
10
15
14
4
RB
LEFT INPUT
11
L
R
RIGHT INPUT
9
INPUT SELECTOR GAIN
VOL. LOUD
BASS
TREBLE
SPKR ATT
MUTE
OUT LEFT FRONT
21
OUT LEFT REAR
19
SERIAL BUS DECODER + LATCHES
24 SCL
23 SDA
22 DIGGND
BUS
OUT RIGHT FRONT
20
OUT RIGHT REAR
18
SUPPLY
2
3
1
7
6
8
17
16
5

JVC

SERVICE MANUAL

WIDE SCREEN PROJECTION TELEVISION

NV-55BX4(US)

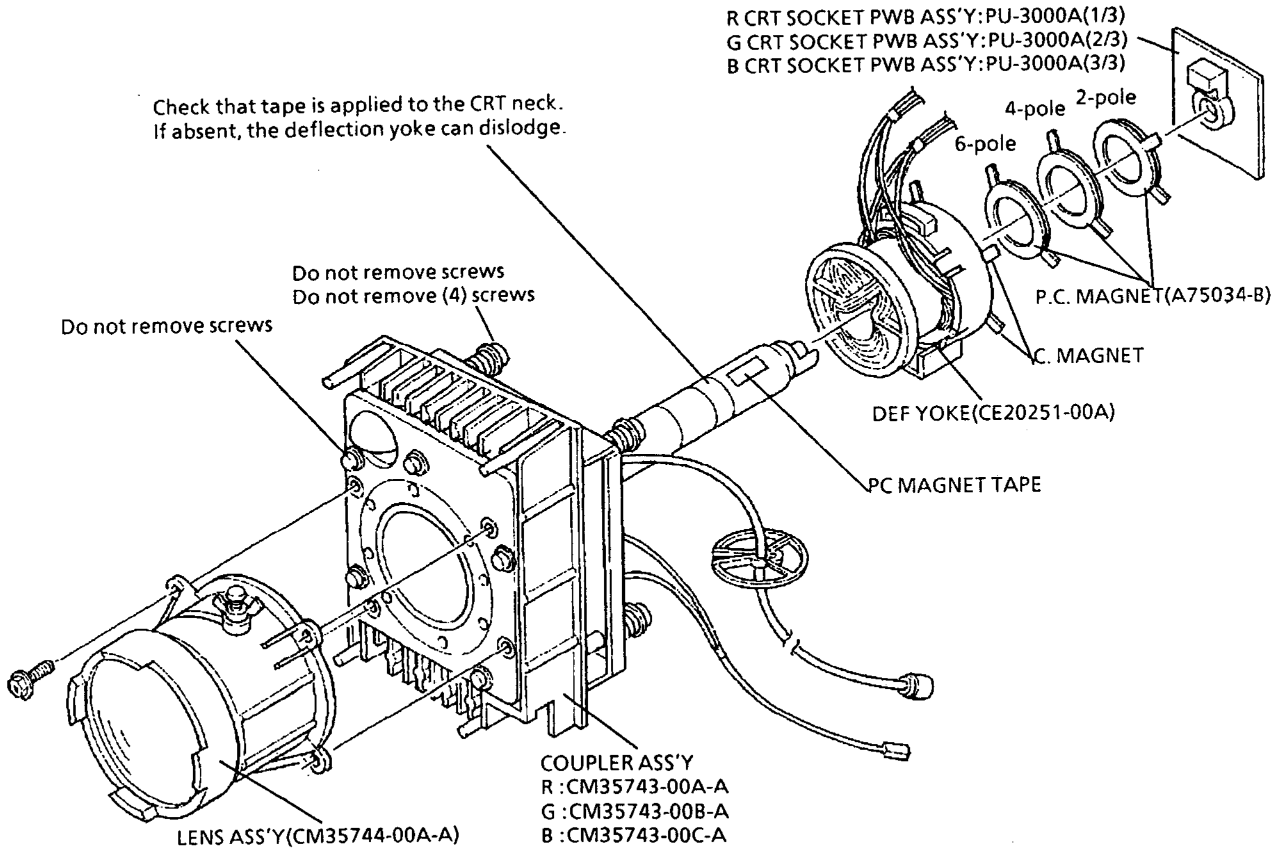
BASIC CHASSIS
PU

Supplementary

Since some details of the NV-55BX4 service manual (No.50774, Apr. 1993 & No.50774B, Jul. 1993) were incorrect, we are informing you of these errors and of the correct descriptions.

1. Addition to Specific Service Instructions

Pole indications are absent from the P.C. Magnet (A75034-B) drawing below the Page 7 Disassembly cautions. These are added.


R CRT SOCKET PWB ASS'Y:PU-3000A(1/3)
G CRT SOCKET PWB ASS'Y:PU-3000A(2/3)
B CRT SOCKET PWB ASS'Y:PU-3000A(3/3)
Check that tape is applied to the CRT neck.
If absent, the deflection yoke can dislodge.
4-pole
2-pole
6-pole
Do not remove screws
Do not remove (4) screws
Do not remove screws
P.C. MAGNET(A75034-B)
C. MAGNET
DEF YOKE(CE20251-00A)
PC MAGNET TAPE
COUPLER ASS'Y
R :CM35743-00A-A
G :CM35743-00B-A
B :CM35743-00C-A
LENS ASS'Y(CM35744-00A-A)

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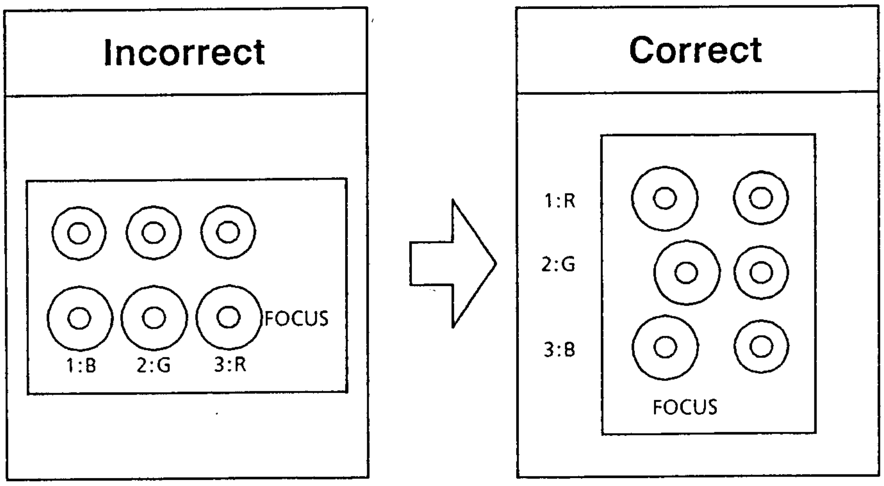
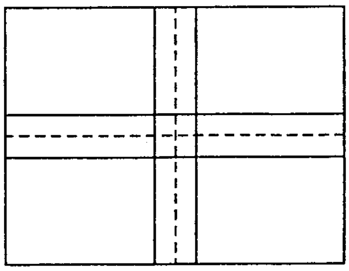
No.50774C
Sept.1993

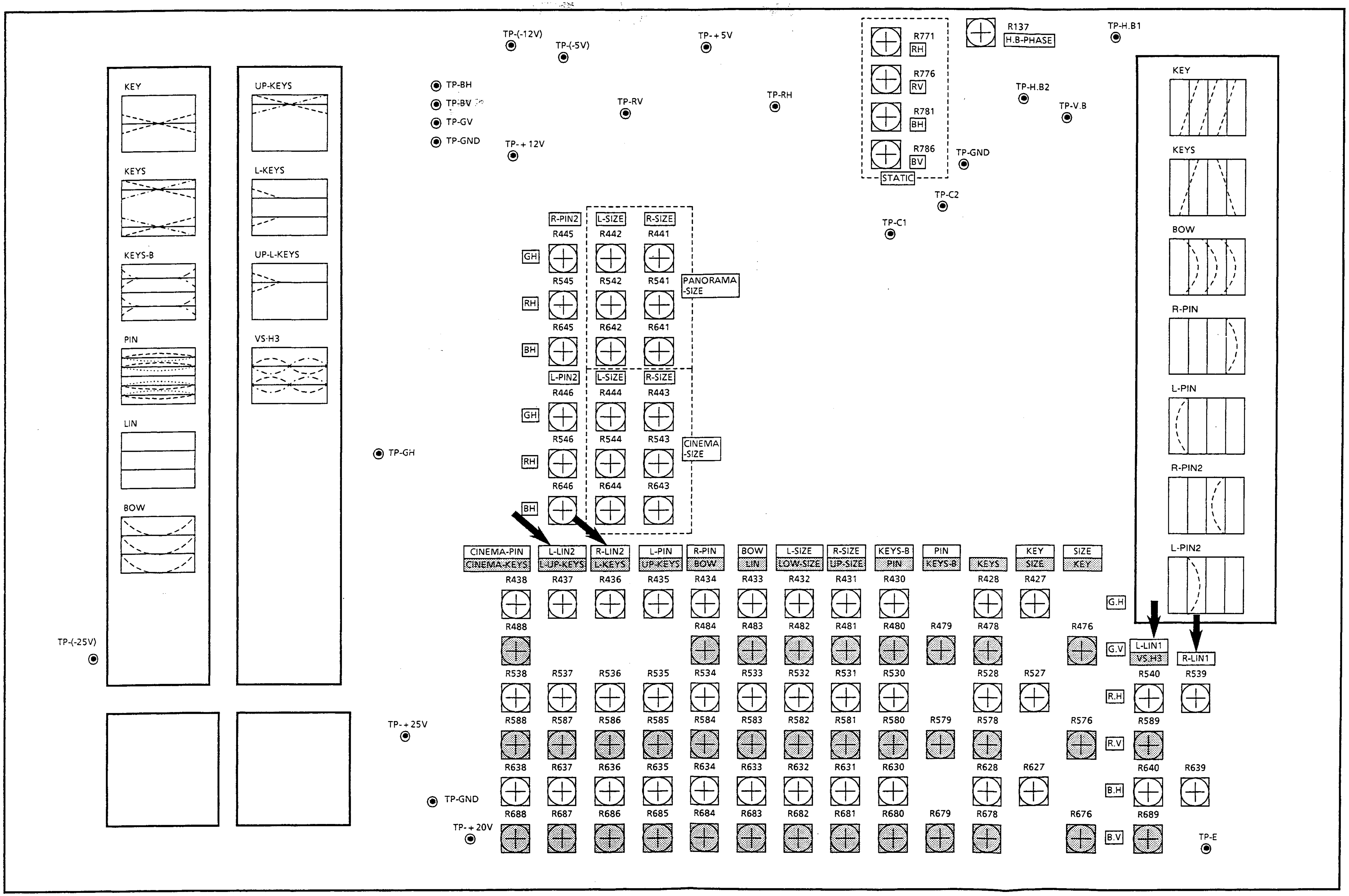
2. Service Adjustment changes

1) The VR names shown in the Page 17 Adjustment Locations are incorrect. Refer to details on Page 3 Conver PWB Ass'y.
2) The orientation of the focus pack is shown incorrectly for the Page 23 Lens and CRT focus adjustments.



3) Additional steps have been added to the Page 24 Convergence Preparatory 1 (Centering magnets) adjustment. Refer to Steps 1 - 3 and 8 in the table.

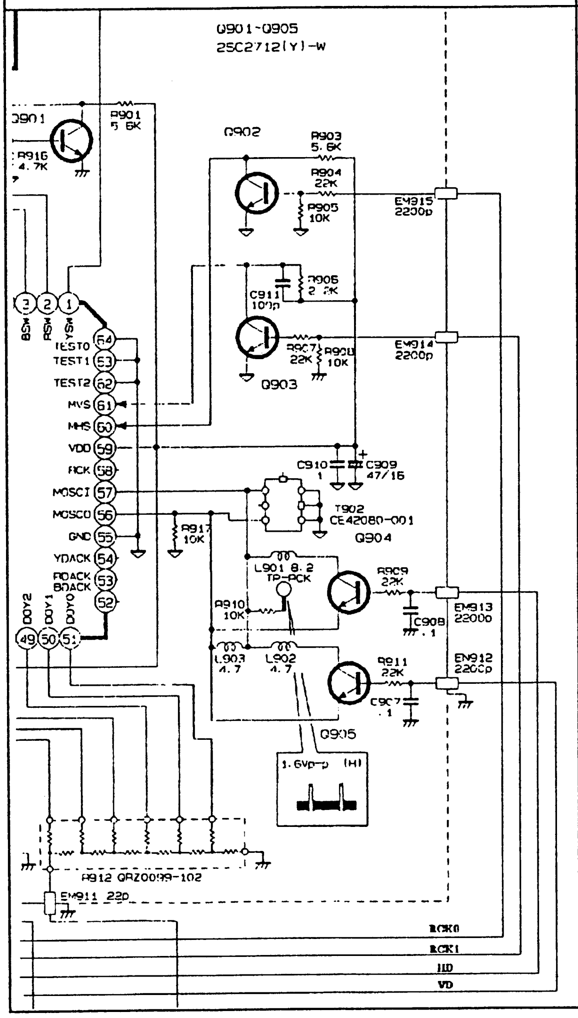
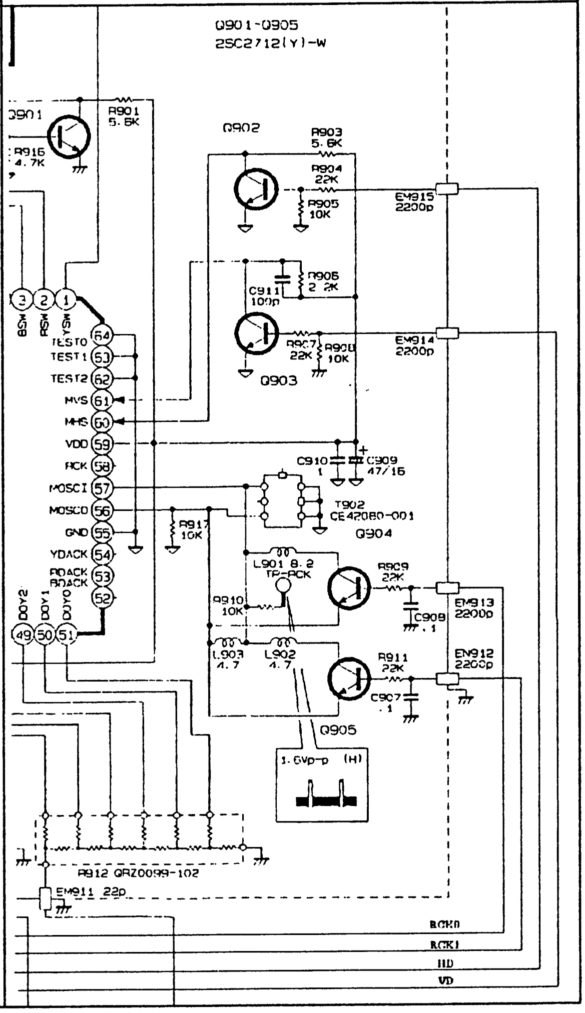
Item	Test equipment	Test points	Adjustment locations	Adjustment procedure
Convergence Preparatory 1 (Centering magnets)	Crosshatch Remote controller		S401(SERVICE SW) [MICON PWB Ass'y]	1. Disengage the connector (PD) of the convergence PWB assembly. 2. Set the service switch (S401) of the Micon PWB assembly between the Normal and Service positions to reset the static convergence setting. 3. Use the remote controller to set the aspect mode to full. 4. Receive a crosshatch signal. 5. Adjust the RGB centering magnets to overlap the center horizontal and vertical lines. 6. First adjust the green image center position with the centering magnet. 7. Then adjust red and blue in the same manner. If they cannot be overlapped,overlap the horizontal lines,then bring the vertical lines as close as possible to the green center. 8. Return the PD connector and service switch to previous settings. 


TP-(-12V)
TP-(-5V)
TP-+5V
TP-BH
TP-BV
TP-GV
TP-GND
TP-+12V
TP-RV
TP-RH
R771
RH
R776
RV
R781
BH
R786
BV
STATIC
R137
H.B-PHASE
TP-H.B1
TP-H.B2
TP-V.B
TP-GND
TP-C2
TP-C1
KEY
KEYS
KEYS-B
PIN
LIN
BOW
UP-KEYS
L-KEYS
UP-L-KEYS
VS-H3
R-PIN2
L-SIZE
R-SIZE
R445
R442
R441
GH
R545
R542
R541
PANORAMA
-SIZE
RH
R645
R642
R641
BH
L-PIN2
L-SIZE
R-SIZE
R446
R444
R443
GH
R546
R544
R543
CINEMA
-SIZE
RH
R646
R644
R643
BH
TP-GH
KEY
KEYS
BOW
R-PIN
L-PIN
R-PIN2
L-PIN2
CINEMA-PIN
CINEMA-KEYS
L-LIN2
L-UP-KEYS
R-LIN2
L-KEYS
L-PIN
UP-KEYS
R-PIN
BOW
BOW
LIN
L-SIZE
LOW-SIZE
R-SIZE
UP-SIZE
KEYS-B
PIN
PIN
KEYS-B
KEYS
KEY
SIZE
SIZE
KEY
R438
R437
R436
R435
R434
R433
R432
R431
R430
R428
R427
G.H
R488
R484
R483
R482
R481
R480
R479
R478
R476
G.V
L-LIN1
VS-H3
R-LIN1
R538
R537
R536
R535
R534
R533
R532
R531
R530
R528
R527
R540
R539
R.H
R588
R587
R586
R585
R584
R583
R582
R581
R580
R579
R578
R576
R589
R.V
R638
R637
R636
R635
R634
R633
R632
R631
R630
R628
R627
R640
R639
B.H
R688
R687
R686
R685
R684
R683
R682
R681
R680
R679
R678
R676
R689
B.V
TP-(-25V)
TP-+25V
TP-GND
TP-+20V
TP-E

CONVER PWB Ass'y (PU-8000A)

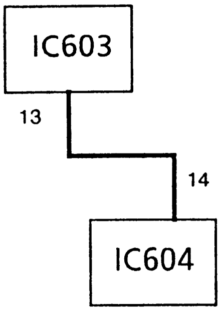
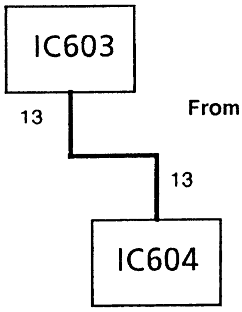
3. Standard Circuit Diagram changes

1) The VR names shown in the Page 5 standard circuit diagram are incorrect. Refer to details on Page 3 Conver PWB Ass'y.
2) Aspect converter PWB assembly (EZ-1D002A) correction (PIP/POP portion)
   The wiring of RCK0, RCK1, HD and VD is shown incorrectly on Page 32 and the Supplementary (No. 50774B) Page 11.

Incorrect	Correct
	

Q901~Q905
2SC2712(Y)-W
Q901
R916 4.7K
R901 5.6K
Q902
R903 5.6K
R904 22K
R905 10K
EM915 2200p
R906 2.2K
C911 100p
R907 22K
R908 10K
EM914 2200p
Q903
BSW
RSW
YSW
TEST0
TEST1
TEST2
MVS
MHS
VDD
RCK
MOSCI
MOSCO
GND
YDACK
RDACK
BDACK
DOY2
DOY1
DOY0
C910 1
C909 47/16
T902 CE42080-001
Q904
R917 10K
L901 8.2
TP-RCK
R909 22K
R910 10K
C908 .1
EM913 2200p
L903 4.7
L902 4.7
R911 22K
C907 .1
EM912 2200p
Q905
1.6Vp-p (H)
R912 QRZ0099-102
EM911 22p
RCK0
RCK1
HD
VD

3) Aspect converter PWB assembly (EZ-1D002A) correction (aspect converter portion)
   The wiring of IC603 and 604 is shown incorrectly on Page 32 and Supplementary (No. 50774B) Page 8.

Incorrect	Correct
	 From pin 13 to pin 13

IC603
13
14
IC604
IC603
13
13
IC604